January 1988 The Naval Aviation Safety Review V.33#1 US NAVY

It's Not Over Till It's Over

By Cdr. Will Champion

THIS simple phrase is rumored to have been immortalized by the great Yogi Berra. More than once, in the bottom of the ninth inning, bases loaded, two outs, the count at three balls and two strikes, Mr. October has stepped into the box and hit one into the parking lot. However, the dramatic comeback has a flip side — the other teams were a second away from victory when they let their guard down.

How does this apply to naval aviation? Consider Hook and Boom Boom, the best fighter crew that ever strapped on a Tomcat. They consistently kicked tail in the fur ball and led the air wing on the greenie board. One flight was a simple AIC BOREX. The mission went without a hitch.

Recovery was normal, and as usual they taxied the Tomcat to the bow and spun her around. Chocks, tie down, shut down. It was all over but the shouting. Hook and Boom Boom dismount their trusty steed, take three steps and Hook disappears head first into the blackened catwalk.

Then there is Airman Smuckatellie. What a day it had been — the Hummer traps, the helo lights. Finally, he could raise those goggles. Not so fast — helo down wash just unlodged the piece of safety wire he had missed in that pad eye he stepped on during the morning FOD walkdown, and it buried itself in his left eye.

Everything we do in naval aviation, whether repairing the aircraft, dropping bombs, placing the fighter in an advantageous intercept position or coming aboard at night with 200 feet overcast and one-half mile visibility demands our utmost attention from beginning to end.

We need all of our people, and we need to keep our limited, irreplaceable assets to do the job correctly. We need to keep bombing on target, kicking tail in the fur ball and fixing the aircraft. We need to remember, it's not over till it's over.

Cdr. Champion is COMNAVAIRESFOR safety officer.

inside approach

Vol. 33 No. 7

A VF 102 F-14 Tomcat. Cover photo by Dave Parsons, Approach Editor.

FEATURES

The Blue Angels and Their F/A-18s 2
By Peter Mersky. The Blues talk about their first season with the F/A-18.

How to Gain 2,000 Hours of Experience in One Flight 8
By LCdr. Pat Hovatter. Discovering a 70-knot increase in head winds is no picnic.

Where Were You When the Lights Went Out? 10
By Lt. Jim Van Nest. An SH-2 crew spends a night in jail.

The Doppler Always Acquires 12
By Lt. R.C. Cecconi. If you don't fly what you brief, then stand by!

Mending a Wrong With a Right 15
By Lt. George Bodine. The flight deck is no place for complacency.

"So You Don't Think it Can Happen to You?" 16
By Lt. Eric Engleman. A very near midair collision due to call-sign CONFUSION.

Advantages Not Taken 18
By LCdr. Rod Baker. Don't let administrative burdens take away from your flying.

My Night in the Barrel! 20
By Lt. L.P. Molloy. A F-14 crew takes their turn "in the barrel."

"Uh-oh, I Think the Hose is Tied in a Knot" 26
By Lt. Mike McLeod. What do you do when the hose is wrapped around your probe?

Another Night Tanker Story 27
By Lt. Dave Maybury. A near midair in the night hawk circle.

Quit Being a Blob 28
By Lt. Jerry Linenger. A simple plan to trim excess body fat.

DEPARTMENTS

Air Breaks 6
Bravo Zulu 22
Index 29
Letters 32
Brownshoes in Action 33

Rear Admiral D.T. Schwaab, Commander, Naval Safety Center
Col. Donald D. Bergman, Deputy Commander
Capt. J.J. Fleming, Chief of Staff
Capt. K.G. Craig, Director Aviation Safety Programs
Cdr. Allen K. Mears, Head, Safety Publications
LCdr. David L. Parsons, Editor

Approach is a monthly publication published by the Commander, Naval Safety Center. Address comments, contributions and questions about distribution and reprints to:

Commander, Naval Safety Center
NAS Norfolk, VA 23511-5796
Attention: Approach — Code 71

Telephone: Commercial 804-444-7416; Autovon 564-7416; FTS 954-7416

ISSN 0570-4979. The contents should not be considered directives and may not be construed as incriminating under Art. 31 of the Uniform Code of Military Justice. Views expressed in guest-written articles are not necessarily those of the Naval Safety Center. The Secretary of the Navy has determined that this publication is necessary in the transaction of business required by law. It is funded and printed in accordance with all Navy publishing and printing regulations and approval of the Navy Publications and Printing Policy Committee. Second-class postage paid at Norfolk, Va., and additional mailing offices. Approach is available for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
POSTMASTER: Send address changes to APPROACH Magazine, Naval Safety Center, NAS Norfolk, VA 23511-5796.

McDonnell Douglas

"The good news about the airplane is that we can fly in a tight diamond formation with wing-tip separations of 24 to 36 inches, the traditional Blue Angel formation."

Safety and the Blues:

The Blue Angels

A Follow-up

By Peter Mersky

Our April 1987 issue featured an interview with LCdr. Pat Walsh, the slot pilot for the Blue Angels, the Navy Flight Demonstration Squadron. The team had recently celebrated its 40th anniversary and was about to transition to the F/A-18.

Now that the 1987 season is over, LCdr. Walsh follows up with his impressions on the team's first year with the Hornet.

Peter Mersky

"The airplane does have some quirks that we have to respect, but it has so much on the positive side that we are extremely pleased with."

Approach: Has the Hornet lived up to its expectations?

LCdr. Walsh: The Hornet has exceeded our expectations. We were concerned at first with maintenance availability, performance and the cosmetic appeal of the aircraft in formation. We were also concerned about the handling characteristics of the aircraft in a 36-inch formation, how to fly fundamental acrobatics — rolls and loops — in an aircraft with digital flight controls. The airplane does have some quirks that we have to respect, but it has so much on the positive side that we are extremely pleased with.

The roll and loop are the basis for our show. Once we understood how the aircraft would perform in those maneuvers, we could derive everything else. The Boss takes overhead maneuvers up at 380 to 400 knots clean and 270 knots dirty. (The Blue Angels F/A-18s have a special Naval Air Systems Command limit of 290 KCAS dirty.)

In the formation roll environment, the Hornet displays very unique characteristics as compared to the A-4F. First of all, the aircraft was not designed to roll at the rate of the

CAUSES ACCIDENTS

(and it hurts, too.)

C97 GS 1187

Naval Safety Center
NAS Norfolk, VA

Having a nice day? Won't you step over and join me for dinner I'm very easy to please and will eat just about anything . . .

Including you.

C95 GS 1187
Naval Safety Center
NAS Norfolk, VA

Poster idea contributed by LCdr. D.J. Dewar Jr., ASO, VAQ 131

Detroit Public Library
JAN 14 1988

Hello out there. Having a nice day?

D 202.13:33/7

Technology and Science
Detroit Public Library

Skyhawk. Additionally, the F/A-18 experiences adverse yaw as it rolls about its velocity vector. What we see in the air show is that the ball never stays centered; it skews to one side as the aircraft experiences 180 degrees of roll. The slower the airspeed in the roll, the more adverse the yaw. The nose attitude falls through the horizon followed by the tail moving in unbalanced flight or a skid. All the planes are experiencing that at different times. So if you were to "freeze" the formation, you'd see the airplanes in a toe-in situation. It's not the real crisp, picture-perfect formation. It's very difficult to balance.

We received a block of Lot IV aircraft that needed to be modified to fleet standards. The flight controls and fuel system are the same. We have very few differences from the fleet aircraft. The gun came out and smoke system went in with the same CG effects as ammo. A software tape patch provides a continuous indication of G and pitch trim on all CRT displays. We also have general aviation VOR/ILS, which is a *real* lifesaver — not only for civilian airfields but is becoming a *must* for Air Force bases.

The planes have held up real well. We have generator and flight control computer problems every now and then, no different than the fleet. We've been able to have six up jets for every show, and have not lost a sortie. That says something about the team downstairs, especially considering these are Lot IV aircraft.

Approach: Is the team satisfied with the spring control device?

LCdr. Walsh: If we had any problem with the spring, it was that the concept was so simple most people could not believe it. The Blues — and every demonstration team we've come across — have always needed a method of flying the aircraft with some force on the stick. This artificial force has been introduced in a variety of ways in previous aircraft. The net result was 8-10 pounds of force on the stick. It provides us with a way to positively and precisely maneuver the nose of the aircraft in formation and removes the "dead band," which almost all airplanes have in one shape or another. It allows for safe acrobatic maneuvering in a multiaircraft environment regardless of turbulence. The worst conditions I have seen were 60 knots of wind at 1,000 feet; aircraft could still do rolls and loops working 3 to 4 feet apart.

and Their F/A-18s,

Peter Mersky

There are four springs located next to the rudder pedal adjustment; all you do is reach out and attach them to the base of the stick. There is still full stick deflection, left and right, forward and aft, but you have to overcome the force of the spring. You still have the incredible performance of the F/A-18, and you have not altered any of the flight characteristics of the airplane. However, now you have a sore arm. This heavy stick force, the amount of which is linear to the G-load on the aircraft, has also significantly reduced the possibility of G-LOC (G-induced loss of consciousness).

The good news about the airplane is that we can fly in a tight diamond formation with wing-tip separations of 24 to 36 inches, the traditional Blue Angel formation. The Hornet is a very stable platform and handles turbulent conditions much better than the A-4. It also turns so much better than the A-4, which had the slats bolted up. The net result for people who watch our shows is that maneuvers can now come in quicker. We're going at 400 knots, and we can get this huge arcing turn radius down to something smaller than what we had in the A-4. As a result, there are less gaps in the show between maneuvers.

Approach: Can you be more specific about modifications for inverted flight? How successful have they been?

LCdr. Walsh: The specific modification to the airplane was that this block of Lot IV airplanes went through an Engineering Change Proposal (ECP) — 55C1 — which brought the fuel system up to Lot VI standards. That's a production fuel system, and it's basically the same as that in the fleet. The only difference is that during inverted flight, a warning system keys off of fuel pressure. The clearance limit is based on wings level

Peter Mersky

"There is one consideration for the aircraft you have to develop an appreciation for: the effect gross variations of temperature have on an all-electric airplane."

time inverted and steady-state fuel flow. There are other factors that routinely and, unfortunately, adversely affect the amount of time we have inverted. We are presently looking for ways to minimize those factors and increase the safety margin. Until this problem is resolved, we will limit ourselves to only a portion of the clearance limit.

Approach: During your arrival show the two-seater was flying the maneuvers, with No. 4 sitting it out on the ramp.

LCdr. Walsh: We like to fly naval aviators in the formation as representatives from the local area. In the past that has included junior officers and commanding officers of squadrons, bases and air wings. At NAS Oceana last year, we flew the CO of VA 55. This year we flew Rear Admiral James Taylor, Commander Fighter Medium Attack Airborne Early Warning Wings Atlantic, and Captain Bob Houser, Commander Medium Attack Wing One. The No. 7 jet is completely compatible. It can fly all the maneuvers with few exceptions.

Approach: We talked about ground operations. Have you found any problems with the new airplane?

LCdr. Walsh: We've been lucky with FOD this year. The procedures we use have solved FOD problems well. We taxi in sections and don't have the real close distances between them. The low intakes are something we just have to respect.

We did not do Diamond formation landings this year, and there are a couple of reasons why. The landing environment in the F/A-18 is something that you simply respect. The airplane, as you know, has had a history of landing gear and landing rollout related problems. With all the airplanes on the runway together, one guy's problem may become every one's problem.

Approach: We touched previously on G tolerance training. Can you give more details?

LCdr. Walsh: Well, standard weight training, flying every day, and being honest with yourself on liberty remains the best insurance for G tolerance.

Approach: One of the main differences in the team's Hornets is the almost archaic harness, almost like a World War II prop fighter.

LCdr. Walsh: The harness is an Air Force harness that is really comfortable to get into. We don't wear flight gear to get into the airplane. We sit down, throw a shoulder in one side of the harness, then the other. There are two straps that come across the thighs, and a strap across the torso, plus two vertical restraints that are on the left and right that simply tie you down to the seat. Then there is a lap belt similar to the arrangement in the T-28, then the LPA.

In order to fly inverted comfortably, you have to be in tight. If there's anything credited to the restraint system, it's that we've had two ejections where pilots were able to walk away, one in the A-4F and one in the F/A-18.

Approach: Can you give a preview of what's coming with the new airplane?

LCdr. Walsh: I can tell you that there's been some question from the fleet as to whether we will change the sequence to further demonstrate the performance of the airplane. That may come with time; we started winter training with five guys that had 20 hours of experience in the airplane and Lot IV

Peter Mersky

"Before we introduce something new, we have to brainstorm a new maneuver. It will be flown hundreds of times, in all kinds of conditions."

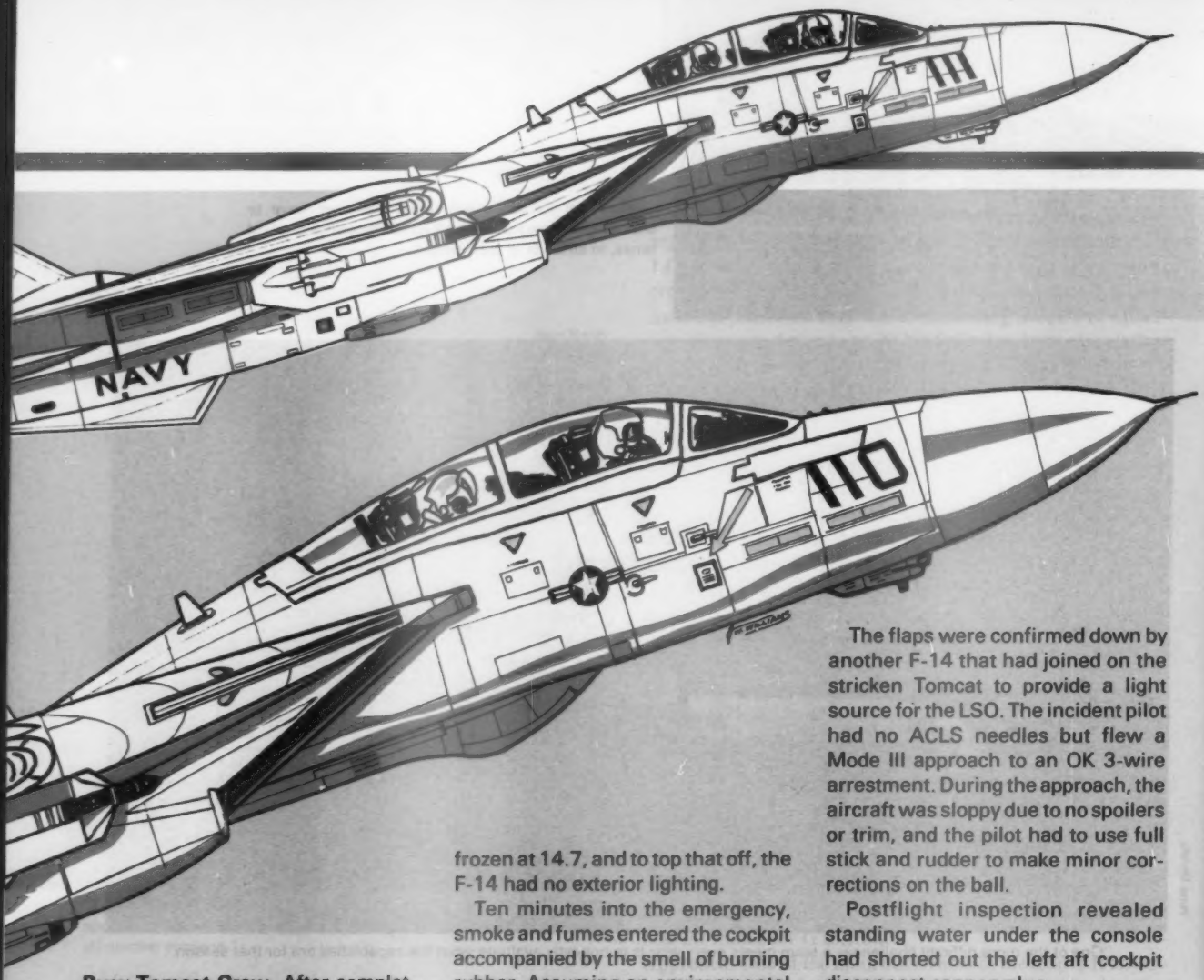
Peter Mersky

"One of the more difficult challenges a team meets every year is to honestly evaluate what the capabilities are for that season. . ."

aircraft that were still wet coming out of the paint locker.

Before we introduce something new, we have to brainstorm a new maneuver. It will be flown hundreds of times, in all kinds of conditions. We have to consider what effect it has on the sequence — high/low ceiling, single-solo — and what effect it has on the airplane. Does it eat up the wing life at a fast rate? Is there a safe out if you lose an engine or have a flight control problem? Will the crowd enjoy it — a fine balance of how hard it is versus how entertaining it is — and finally, what does the fleet think?

We've accomplished our goal for the transition year to finish the '87 air show season with all the same pilots and airplanes in November. We felt early on that we wanted to establish a program that would allow for steady growth. One of the more difficult challenges a team meets each year, though, is to honestly evaluate what the capabilities are for that season — and to act on that decision. We are proud of this year's effort and look forward to seeing the Hornet around for years to come. ◄



Busy Tomcat Crew. After completing a night intercept, an F-14 crew suddenly lost their central air data computer (CADC), detail data display panel, tactical information display panel, and had an inertial measurement unit light. The pilot could not reset either the airborne inlet control system or CADC, and noticed he had also lost all trim. The crew decided to return to the carrier.

Since the TACAN was determined to be unreliable, the F-14 requested vectors from the ship. The RIO noticed the wings had swept back to 50 degrees, and the pilot returned them to 20 degrees using emergency wingsweep mode. The pilot also discovered he had no indications of RPM, TIT, fuel flow, AOA or wingsweep. Fuel quantity indications were frozen at 14.7, and to top that off, the F-14 had no exterior lighting.

Ten minutes into the emergency, smoke and fumes entered the cockpit accompanied by the smell of burning rubber. Assuming an environmental control system problem, the pilot selected air source off to secure engine bleed air.

A flash occurred in the rear cockpit, and a fire erupted under the aft panel of the left equipment console. Noting several popped circuit breakers, the RIO secured all electrical equipment. The fire went out within 60 seconds.

The crew declared an emergency and received vectors for the approach, descending to 3,000 feet. They dumped fuel to attain an estimated max trap weight and dirtied up at 25 nm to confirm on speed checks. They found that the speed brakes and slats were out but had no indications of flap position or spoilers being engaged.

The flaps were confirmed down by another F-14 that had joined on the stricken Tomcat to provide a light source for the LSO. The incident pilot had no ACLS needles but flew a Mode III approach to an OK 3-wire arrestment. During the approach, the aircraft was sloppy due to no spoilers or trim, and the pilot had to use full stick and rudder to make minor corrections on the ball.

Postflight inspection revealed standing water under the console had shorted out the left aft cockpit disconnect cannon plug.

It's Okay to Yell "Uncle." We need aggressive aviators in the cockpits, but don't confuse a tiger with a dodo. The young RIO had not been feeling too well due to a bout with flu. The night before, he had cramps and felt queasy. He did not feel much better the following morning, but he ate a light breakfast and lunch. He fooled himself into thinking he felt a little better, though nowhere near 100 percent.

He made his scheduled brief for a two-plane form hop. In the operating area, after some mild maneuvering, our hero told the pilot he felt sick and sweaty. He removed his mask and vomited. Though the pilot asked how he was feeling, the RIO allowed

AIR BREAKS

the flight to continue until he felt the onset of lightheadedness and disorientation. He locked his harness and replaced his mask, after which he fainted.

The pilot, after failing to get a response from his backseater, looked in his mirror and saw the RIO immobile, with his head forward. The pilot called his wingman and declared an emergency. The wingman reported the RIO remained motionless.

The F-14 made a straight-in approach and was met by the flight surgeon and ambulance. The RIO remained unconscious even after the canopy was opened. He was placed on a stretcher. He eventually came to, but was confused and was shivering. He had been unconscious for 15 minutes.

Examination at the dispensary revealed the young aviator to be suffering from dehydration and viral illness. He was rehydrated and later released. Locking his harness in flight prevented him from lowering his head, which might have alleviated the lack of bloodflow to the brain that brought on his unconsciousness. If he vomited while his mask was on, he might have drowned.

Do not fly when you're sick! Period. End of sentence — Ed.

Fried Hornet? During night operations involving a mixed bag of F/A-18s and F-14s, a Hornet crew manned there were several AV AIR HOT caution lights, they were eventually extion lights, they were eventually extinquished using NATOPS procedures.

While on cat 1, the pilot lost the video for his HSI. Unable to restore the HSI display, the pilot and CATCC rep agreed the night CQ mission could continue with a Cat II IP.

After the first trap, false G-limiter cautions appeared. After the second cat shot, the 'master caution' illuminated with a tone, and the pilot noticed the HUD was frozen with obviously false information indicating the aircraft was airborne with 156 KIAS, wings level, no velocity vector and waterline 5 degrees nose up. The left DDI had the same picture with a CAUT DEGD, VEL and INS ATT CAUTIONS present. The standby instruments indicated the aircraft had 30-40 degrees right wing down with its nose on the horizon.

The pilot leveled the wings, selected burner and began a climb to 3,500 feet.

Five minutes of in-flight alignment yielded a moving waterline on the HUD with good airspeed and altitude. But the headings on both the HUD and now-partial HSI were frozen 180 degrees apart and 90 degrees from the wet compass. The Hornet was vectored for a no-gyro ILS approach to an uneventful trap.

One of the possible causes of the initial loss of displays was thought to be prolonged exposure to the exhaust of another F/A-18.

Stuck Collective. While standing plane guard duty, the SH-3H crew performed multiple auto/alt approaches followed by five manual approaches to coupled sonar dips, all without incident.

During the sixth manual approach, the pilot in control (who was also the HAC) lowered the collective to approximately 30-35 percent of torque. At 50 feet he was unable to pull up collective to achieve a hover. He called for speed selectors full forward, which reduced the helo's rate of descent.

The HAC checked the collective friction and saw that the collective pitch lock knob showed about three screw threads. He was unable to unscrew the knob any further. The first air crewman was finally able to free the knob, but the combined efforts of the HAC, copilot and first air crewman could not raise the collective. The HAC then said he was going to ditch the H-3 and broadcast a mayday. The Sea King made a soft touchdown.

After the water landing, the crew freed the collective and flew the aircraft back to the carrier. The helo was washed and inspected by the reclamation team. Postflight inspection revealed no immersion damage, but the team found the collective would bind at one position. The collective shaft was cleaned, the friction block collar replaced, and no further jamming occurred.

Fuel Leak in a Turkey. Following a catapult launch, an F-14 pilot noted a left fuel pressure caution light illuminate, with no other cockpit indications. Four minutes later, he selected wing/external transfer switch to auto from off. After confirming external fuel was transferring, the pilot noted the fuselage/feed tapes were still rapidly decreasing.

Correctly assuming a fuel leak, he checked that the dump switch was off, pulled the fuel feed/dump circuit breaker and requested an emergency pull forward for an immediate recovery aboard the ship. Although the F-14 launched with 20,000 pounds total fuel, nine minutes after takeoff, there were 14,000 pounds remaining.

The LSO confirmed a massive fuel leak as the Tomcat came into view approximately five miles from the carrier. Following the arrestment, the aircraft continued losing fuel from the bottom of the left engine, aft of the MXU. The crew secured both engines and exited the aircraft. Total fuel on board was now only 7,000 pounds.

Postflight inspection revealed the left engine's main motive flow fuel outlet hose had separated from the bulkhead-mounted elbow joint, allowing fuel to be pumped into the engine bay. ◄

How to Gain 2,000 Hours of

THERE I was, a brand new P-3 aircraft commander about to embark on my first mission. I opted for the standard fuel load since it was a standard mission and poured in 31 tons of JP, a full bag. That would give me more than enough for the mission and enough to meet the NATOPS requirement for a nominal 8,000 pounds on top. .

It was a clear December morning in Japan. Everything was routine, except for the area in which we were to conduct our mission, but that wouldn't make a difference. I had flown missions of 12.5 hours before, and we weren't scheduled today to PLE (Prudent Limit of Endurance), so fuel wasn't a problem. It was winter, and cold weather gives you better performance.

We took off and climbed to FL230, a rare occurrence after a 142,000-pound takeoff. The weather was CAVU, and

Once established at cruise altitude, we discovered that the head winds were not quite the 70 knots we expected. Our transit toward the beach showed a 140-knot head wind.

Experience in One Flight

By LCdr. Pat Hovatter

with a 70-knot tail wind, we were to be in the op area in no time. There was one small problem: The flight station had no chart of the op area since the mission and area of operation had changed after we had taxied. That could be resolved easily by having the navigator keep a close watch on where we were; that was his job and he had the charts.

After three and a half hours of sheer boredom, we decided to head farther south. Arriving on station, I recomputed my go-home fuel as 24K using the same 70-knot winds we experienced en route. The navigator agreed. Several hours later we decided the mission had been accomplished and decided it was time to go.

The totalizer read 25,500 pounds, which gave us 1,500 pounds for mom and the kids based on my earlier computations. Once established at cruise altitude, we quickly discovered that the head winds were not quite the 70 knots we expected. Our transit toward the beach showed a 140-knot head wind and a matching 140-knot groundspeed at max range for our drag count.

A quick fuel calculation for our 800 nm transit home revealed 1,000 pounds on top. NATOPS calls for a minimum of 6,000 on top. Not quite satisfied with the result, we tried it a different way. No change. The flight engineer did his own calculation — same result. It's difficult to describe the feeling you experience when you realize you may have to swim the last 100 miles. The nearest land was our destination, but we considered the effect of the winds in reaching an alternate. The pit of my stomach was boiling.

The copilot suggested contacting Yokota Metro to confirm our destination and en route weather. The weather was forecast VFR. We experienced turbulence associated with the jet stream at FL250 and descended to FL230. We lost 25 knots of head wind and increased our fuel flow slightly to maintain our groundspeed. The descent improved our situation, but not by much.

For some reason, a blurb out of NATOPS shot through my head: Increase TAS by 30 percent of a head wind component. The flight engineer agreed, and we added 200 SHP to each engine to see what would happen. It increased our fuel flow 300 pounds per hour but brought our groundspeed up to 205 knots, and a fuel calculation now gave us 8,000 pounds on top. We began to breathe a lot easier and prayed that no malfunctions would occur. We discussed, then rejected, the possibility of descending even lower and sacrificing the increased fuel flow for a corresponding further decrease in head wind. The remainder of the flight was almost uneventful.

The squadron has a Stan Note recommending instrument approaches at night for airfields other than home; but because of clear visibility, congested traffic and low fuel, I elected to shoot a visual. I figured this would save me some fuel, and besides, I was tired and wanted to get on deck after having cheated death once today.

It was night by then, but I felt comfortable enough with the area after two and a half years experience with the airfield. I was flying in the right seat with the 3P at the controls. Finally, the field was in sight. I informed Approach and switched to Tower, but the TACAN was showing us 7 DME off. I was not sure which of the three airfields in the area I had in sight and elected (by indecision) to fly the TACAN. I finally recognized a familiar landmark just as Tower reported us in sight and cleared us to land.

I realized that we were extremely high and fast and immediately dropped the gear, went to flight idle and pushed the nose over to dissipate altitude. Maneuver flaps were selected to increase the drag as much as we could. We were still too fast to select approach flaps, so as a result, we couldn't complete the landing checklist beyond the second item.

I didn't want to wave off for two reasons: fuel and pride. It became obvious that a little pride needed to be swallowed in order to see the sun rise again. Tower cleared us downwind, and we finally landed safely with 7,200 pounds remaining. A quick trip to the head alleviated my only remaining problem.

Here are the lessons I learned (or relearned) that day:

— Expect the unexpected. Plan on the worst case fuel and winds.

— Don't just read sections 3 and 5 in NATOPS; all sections have valuable information. In this case the information in sections 11 and 12 caused me to add power with the head wind, which saved us.

— A thorough weather brief of all possible op areas is important.

— Even though specific fuel consumption is better at altitude, descending to lose a head wind may yield better specific range.

— Take charge in the cockpit; never let things get done through indecision. Communicate your intentions; that would have prevented the DME confusion.

— Stan Notes are usually written because someone else has tried to do the same, such as shoot a visual at night at airfields not totally familiar.

— Know the difference between max rate of descent (what I was doing) versus max angle of descent (what I should have done). If I had slowed up and dropped land flaps, the field would have been mine on the first pass.

Don't try to salvage the approach when its obviously AFU! ◄

LCdr. Hovatter is the ops officer for VQ 1. He served previous tours in OPNAV, VQ 2, VT 2 and VP 10.

Where Were Y

You When the Lights Went Out?

By Lt. Jim Van Nest

YOU probably haven't heard that expression in years. To a select few in naval aviation, this phrase holds a special meaning. Of course, I'm talking about those lucky souls who have experienced a total electrical failure in flight.

A few weeks back, while coming home from that lush Caribbean garden spot known to ASW types as AUTEC, I had such an opportunity. As an eager J.O. flying the SH-2F and always looking for new experiences, I couldn't pass up this one. It came in the form of a battery failure that NATOPS calls a thermal runaway. Uncommon? Yes, very. But those things happen and always when it's least expected.

The day began with a pleasant flight up the East Coast. Not a bad day for flying — hot, hazy and humid but at least VFR. Following a brief refueling stop at an Army airfield, my crew and I began the 1.8-hour leg to NAS Norfolk. About midway, one of my crewmen began to detect a faint, unidentifiable odor.

As I began to check the distance to the nearest divert field, I had the cabin doors closed in the hope of pinning down this unusual scent. To our amazement and relief, the odor promptly disappeared, which led us to believe that it was coming from the thick, hazy atmosphere.

Immediately following a quick sniff of untainted air and my announcement that we would soon be on deck safe and sound, my copilot felt the distinctive cyclic kick that signifies a loss of hydraulic boost. I scanned the instrument console only to find a dizzying array of inoperable gauges and radios. That sight gets the adrenaline flowing! As my copilot began the approach, I tried to reset the applicable equipment, but to no avail.

Choosing a landing site did not pose any particular problem since the terrain below was somewhat akin to the Great Plains. Likewise, the light surface winds and lack of power lines made for near ideal conditions. It seemed luck was on our side as we selected a field about a half-mile away. On the other end of the field, I saw a group of buildings resembling a factory. That meant civilization and ready access to a telephone. We made an uneventful boost-off landing.

Postflight inspection revealed a failed battery and the obvious source of the elusive aroma. Since the battery vent-drain is located on the exterior of the aircraft, it is not surprising that the smell went away when the doors were closed. Apparently, a thermal runaway is one of those insidious malfunctions that can sneak up with little or no warning and, in an extremely short period of time, wreak havoc with your electrical system.

Within minutes of our arrival, we were met in the field by a group of men in uniform. Could this be the Air Force or Coast Guard? No such luck. They were guards who promptly informed us that we were at a maximum security state prison farm. Yes, you might say we landed in jail. They proved to be very helpful, however, in providing transportation to the "big house" and readily obliged my request to place a telephone call. I could hardly resist asking if I got only one. A repair effort was arranged, and within a matter of hours, my squadron sent a new battery and a couple of troubleshooters. Following a night spent in the prison officer's quarters, we resumed our journey to NAS Norfolk.

When asked the question in the title of this article, I feel fortunate that I can say, "right over the largest cow pasture and prison farm in North Carolina." The point is that this could happen anytime or anywhere. Had any of the parameters been different, the outcome would very likely have been different.

There is no moral to this story. It's just meant to provide food for thought. How often is a total electrical failure or a DC power failure part of your preflight brief? ◄

Lt. Van Nest is a helicopter aircraft commander with HSL 34.

The Doppler Always Acquires

By Lt. R.C. Cecconi

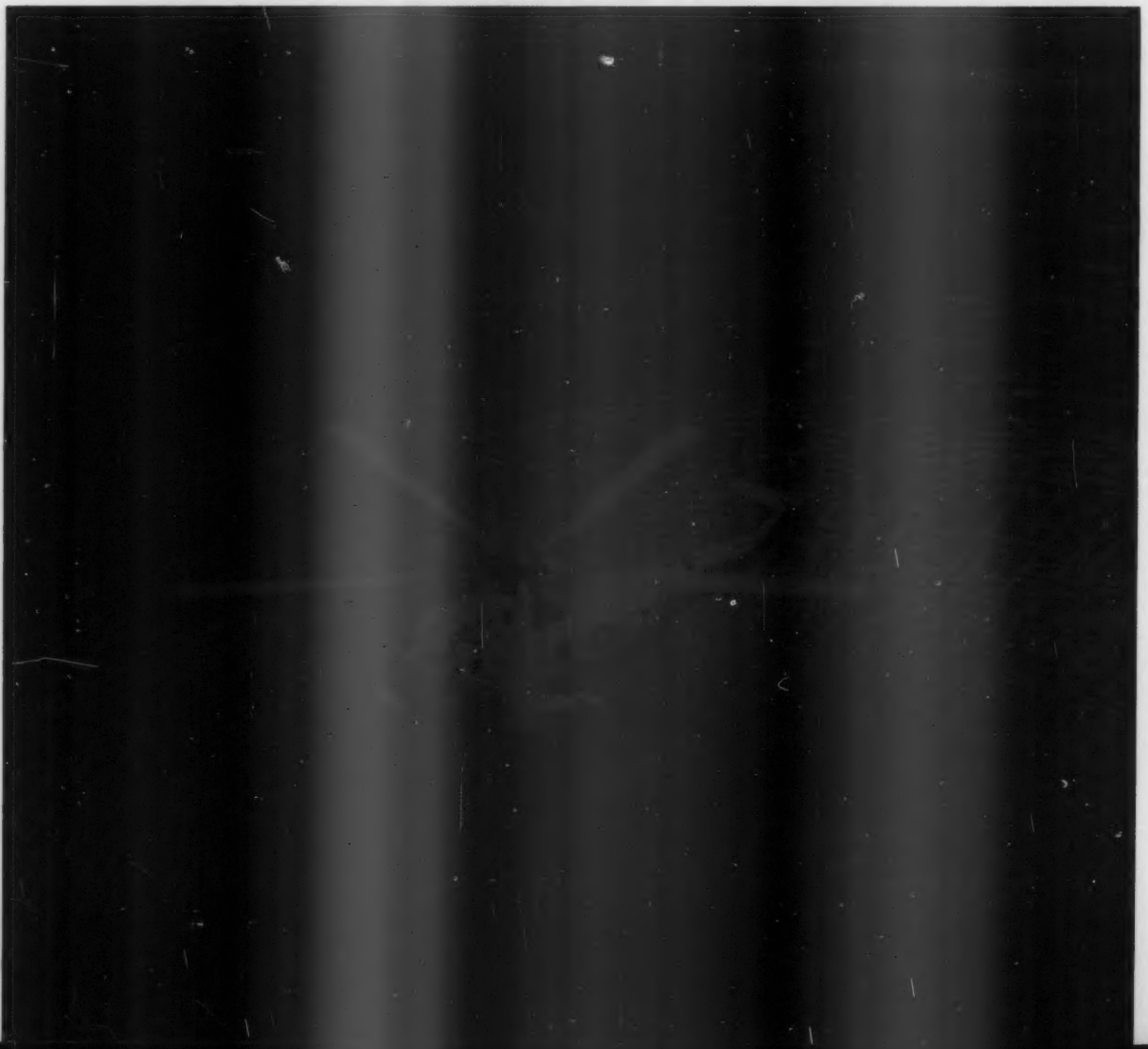
ALTHOUGH this is a story about SH-3H pilots, there are lessons to be learned for all airmen. It concerns safety of flight versus mission requirements, personal limitations, situational awareness and flying what you brief (the ultimate difference in this sea story). Finally, it concerns how we train as a crew.

Having recently been given the blessing of my CO and a check ride by my XO that was guaranteed to induce a large dose of humility, I was a newly designated Helicopter Aircraft Commander. Of course I was extremely eager to exercise my new-found freedom, and I felt I wasn't getting all the HAC time I should be.

Shortly after my designation, the squadron operations officer asked me if I would volunteer for the upcoming FRS CQ DET our CV would be tasked with. We would cover the plane guard duties. "Det, volunteer? You are outta your tree!" I responded.

But he was a crafty Ops O. Smiling coyly, he dangled the carrot. "'You'll get lots of that HAC time you've been crying for!"

Steam began to rise from my head as I considered. My wife would kill me . . . HAC time . . . hmmm. Greed wins again.



A coupled approach to a hover with no horizon is like flying in a large india ink bottle. To attempt it with unreliable doppler is as crazy as walking in front of A-7s to see if they are turning at high power.

"OK, but if I don't get flight time I'll never volunteer again." He just smiled and took down my name.

So I went on the Det and it was going well. I was getting plenty of flight time, all of it night, and most of it was actual IFR. I had, in a short time, become what I considered a totally competent HAC; and I felt I was developing a substantial amount of moxie. I had set myself up for this particular night hop.

The brief was thorough. I take great pride in consistent and thorough briefs. My copilot and I had already done this many times, and we were used to flying with each other. George was a good Helicopter Second Pilot (H2P), and I trusted him completely. There was no reason to think this hop would go any differently than they had been going all week. An important part of my brief covers vertigo. I like to brief that if either of us perceive the other as disoriented while on the controls, and he feels uncomfortable, then he would take the controls and report "I've got it!" There would be no discussion until after the flight. I felt that there would not be time at the altitude at which we fly night plane guard to talk each other out of vertigo.

This particular night the weather was overcast, light variable winds, 2.5 NM visibility and a glassy sea state. No competent H-3 pilot can relate to that kind of weather without a slight anxiety attack. It would mean no doppler return, no horizon — a totally black IFR night. But I was ready to go and so was my copilot. We had our normal crew of two AWs and an NFO from the ship's company who was going along for some special crew time.

We had an uneventful launch. True to the forecast, there was no horizon, and the glassy sea state was playing havoc with our doppler return. The only things visible were the lights from the CV. The rest was a black void. George had been working towards his HAC designation, and we spent most of the flight discussing systems and limitations as well as tactics. We switched controls at regular intervals to keep sharp, and we frequently observed that no regular doppler return was being received. We briefly discussed the possibility that the doppler may have been Tango Uniform, but our playmate told us he was getting the same indications, so we concluded that the lack of sea state was keeping our doppler from operating properly.

We were about one hour from our charlie, and hadn't completed any approaches to a night doppler hover. Although we were not receiving any doppler return, I knew that once in a hover, the water would be sufficiently disturbed to produce a reliable return signal, giving us good information. Of course, a coupled approach to a hover with no horizon is very much like a flight in a large india ink bottle. To attempt it with unreliable doppler is almost as crazy as walking in front of A-7s to see if they are turning at high power. I knew we could handle it though, no sweat.

"Standby alternate," I said to George, who initiated the coupler checklist. As he read the checklist, I made mental notes on how the approach should go. "Coupler engaged, feet on the floor, 5-8 degrees nose up on the gyro. Make sure the heading stays constant. Scan the airspeed indicator — no groundspeed and drift information without the doppler — and radalt for all the appropriate indications."

My mental checklist was complete, and I was prepared for the approach. George informed me that the checklist was complete, and I commanded, "Coupler." He pushed the ASE coupler button and said, "Engaged." The approach profile was coming out relatively normal as the aircraft descended to the unseen water below.

"80 feet, 30 knots."

"Roger," I replied. The torgue began to increase at 60 feet indicating all was normal. I should start to see doppler indications any time now. The aircraft settled below 40 feet briefly, and I brought it back up. No problem — my scan slipped a bit, but I got it right back. Still no doppler information coming. I couldn't see anything outside the helo for reference. Normally at 40 feet you can see some bioluminescence or salt spray from the rotor wash, but not this night. I started to feel uncomfortable. Still no doppler return, and now I felt about 15 knots of wind coming through my window, indicating that we were sliding rapidly to the left. OK, scan the gyro, still no doppler, but altitude is good. Then I started to feel 15 knots of wind coming through the right side; we were drifting right rapidly. I began to feel even more uncomfortable. A slight case of vertigo was developing. I had to work to keep my scan going, but I was still able to hang in there. The doppler was still not giving reliable information, so I had an easy decision to make.

"George, let's get out of here!"

"Concur!" Did he sound relieved? I had a mild case of vertigo coming on, no visual cues at all outside, and I had to execute a departure from a coupled hover. What happened next proved to be a real education in how fast a situation can go downhill.

The automatic stabilization equipment (ASE) in the H-3 controls yaw, pitch and roll in a coupled hover and there is a release button on the pilots collective that allows the pilot to secure the system in case of a malfunction. I had grasped the stick in a death grip and simultaneously released both the coupler and the ASE. The helicopter quite naturally began to increase power and climb out as the coupler is programmed to do. By releasing the ASE, however, I had removed all heading and pitch and roll control. I had placed myself in a self-induced emergency situation. My vertical gyro showed me 15 degrees nose up, and I began to battle for control of it, forcing the nose back down. Next it went 10-15 degrees nose down, then nose up again. My mind raced. Where was the water? I had become very disoriented and began to pull maximum power. I had to get away from the water. My judgment had become clouded as vertigo set in. An uncontrolled entry into the water at night would be deadly.

Continued

The heavy increase in power I had demanded caused the aircraft to enter a radical rotation to the right because of the heavy torque load. My NFO passenger later said he was suddenly thrown violently to the right. I felt like the aircraft was flying away from me. Total vertigo had set in, and things were going very wrong. It had been only a matter of seconds and I had lost all sense of direction. I had lost complete control of heading as I still wrestled with the nose attitude. It was about this time that I completely lost the bubble. The right rotation had increased to an almost unrecoverable state. I thought we were going to crash. I felt as if I were outside of the cockpit, totally detached from the incident. George shouted, "I've got it!" He had seen our heading going out of control and had grabbed the controls. I immediately let go and began trying to recover my scan.

"ASE is off; the ASE is off!" George yelled while he wrestled the heading back under control. I immediately reengaged the ASE and returned to the gauges.

My scan began to come back when I noticed we were at 500 feet and climbing with zero airspeed. "Airspeed," I called, "airspeed." I applied some light pressure on the cyclic. George got the idea, and gradually our airspeed increased to 70 knots and we started breathing again. Heading was under control; airspeed and altitude were back under control. I still had vertigo, but it was starting to subside.

"That was close; now where are we?" I wondered. We had climbed to 1,000 feet, and we were seven miles in front of the CV during the recovery in progress! How could we have gotten so far away from starboard delta? We had to get clear before we FODed a high-speed stove pipe. I pointed out our position to George, and he turned and descended to get us back to our normal airspace. It took about 10 minutes for all the vertigo to dissipate. I spelled George at the controls and spent the next few minutes in quiet relief, followed by 30 minutes of animated discussion about the virtues of dry cockpits and alert copilots.

Our recovery and the Case III CCA were uneventful. It was good to feel the main mounts settle on the deck. Later as George and I went to midrats, we looked at each other and laughed with a great deal of relief and head shaking. Pizza night in the dirty shirt wardroom was never better.

What are the lessons I learned, or relearned? I was fully current at night. I had logged all the required night approaches and so had my copilot. We had no reliable doppler return throughout the flight before and during the approach. There was no visual reference available to offset my lack of doppler information. Why shoot an approach under those conditions? There were no submarines to track nor survivors in the water. Plainly, there was no reason to punch the coupler button that evening. The No. 1 rule in peacetime and non-emergency situations is safety first. No other mission requirement overrides it. Safety of flight is paramount, and I should have known better.

Know your own personal limits. We've heard that many times, but every once in a while one of us proves that we don't always comply. I have experienced vertigo before and took all the right steps; switching controls is not something I'm shy about. Why didn't I tell George I was feeling vertigo on this particular night? If I had, there were a number of options George had to choose from to prevent a mishap. He could have initiated an abort that I couldn't see was necessary. He would have been alerted to the problem and could have taken control before we entered an extremis situation. The lesson here is that vertigo is out there. Believe it can happen; it is insidious, and it can come back and bite you if you are unprepared, no matter how good you think you are.

The one bright spot in this incident is the old adage, fly what you brief. I briefed that if the other pilot appeared disoriented, take control and firmly announce, "I've got it." There would be no argument and no discussion. George took control quickly; I relinguished it when he said "I've got it!" It was properly briefed; that's how we played it, and it prevented the flight from terminating in a mishap.

Situational awareness should also be addressed. Somehow we ended up near the night recovery pattern, at an altitude that may have put us in direct conflict with fixed-wing traffic. True, we cleared the area when we realized where we were, but we made no emergency transmission on UHF to warn traffic in the area. It could have resulted in a worse mishap than we were trying to avoid. Know where you are at all times.

The evolution did underscore the value of the crew concept. We either fly alone and die together, or fly as a team to accomplish the mission safely and successfully. George saw the problem and despite his H2P status, he took firm, decisive action and saved the Navy a valuable air asset and, more importantly, five trained airmen. ◄

Lt. Cecconi flies the SH-3 with HS 2, NAS North Island, Calif.

Numbers you can live with

1-800-HOT-SFTY

It's the Safety Center hot line, and it's open 24 hours a day to handle any safety question you might have. Use it. It can't hurt.

Mending a Wrong With a Right

By Lt. George F. Bodine

IT had been a long deployment in the I.O., and we were on the down side of the cruise. Relief on station was due within a few days. The ops tempo had noticeably changed as I went up to stand my Alert 5 in an F/A-18, one of two Hornets sitting on the port side behind cat 4.

It was unusual for us to stand alerts in aircraft parked on the port side of the ship. Their noses were pressed right up against the foul line. Preflight, man-up and turn were all uneventful — all standard ops that I had done over and over; I was doing everything by rote when they stood our Alert 5 down to an Alert 15.

The jet spooled down, and I climbed out, still on automatic. Several troops gathered at the bottom of the aircraft as I descended the ladder and stood on the deck. In retrospect, I'm glad I stopped to talk a few seconds with them.

We all stood between the two jets, a small group talking and not looking outside of the immediate vicinity. I turned to leave, headed out into the landing area, when an S-3 landed with a tremendous thump. The arresting gear screamed in front of my feet as the wire was dragged out. I had almost walked out in front of an aircraft trapping. I can't describe how huge it seemed, how immense, when it magically appeared. Even if the wing had not separated my dull head from my shoulders, the arresting wire would have been ripped out across my legs as I entered the landing area.

I didn't believe *I* would fall into that trap. I looked around me. One plane captain with full-moon eyes was staring at the landing area. Another man clutched his chest, making the motion of a heart tripping along at breakneck speed. Yet, I noticed they weren't really looking at me; apparently no one seemed to have noticed the fact that I had just about ruined a squadron's accident-free cruise.

In those several seconds after my first mistake, I almost compounded it with another. I almost left the plane with no one the wiser. I didn't want anyone to know that I — the NATOPS Officer — had almost made a fatal mistake: walking into the landing area without checking to see if the deck was open.

I managed to find the courage to pay more than lip service to a safety program. I turned back, walked up to those men and told them what I had almost done. Guess what? After I said that, everyone began to talk excitedly; and of the five of us, only one man had heard the Boss call the deck open moments before over the noise of the turning Hornet.

We debriefed it among ourselves, and we all learned something: Then I went downstairs and briefed it at an AOM. For me, that was extremely difficult — to stand up at the front of the room and admit I made a mistake to men who evaluate me officially, to my peers, and to those who are junior to me. Yet, *no one* had a derogatory comment. Instead, the opposite was true. Some other "I was there" stories emerged.

A caution flag should go off in your mind whenever you find yourself conducting flight ops by rote, when you are on "automatic pilot."

Safety programs and publications came about partly because pilots found a need to pass on their mistakes, to have a forum where these mistakes could be aired without censure.

To do that requires many things. It requires an honesty on your part, a willingness to pass on those lessons learned even when they don't put yourself or actions in the base light. It takes more than lip service; it demands active participation by all hands and an open, receptive command atmosphere in which you can come forward.

So, if you're fighting complacency during those "routine ops," good for you. If it unknowingly settles on your shoulders some day and you make a mistake, admit it. Your momentary lapse — which *all* aviators have — may not make you look like a star, but it may prevent a repeat of your error. ◄

Lt. Bodine is the NATOPS Officer for VFA 113, the Stingers, attached to CVW 14 in the USS *Constellation* (CV 64).

Midair Collision

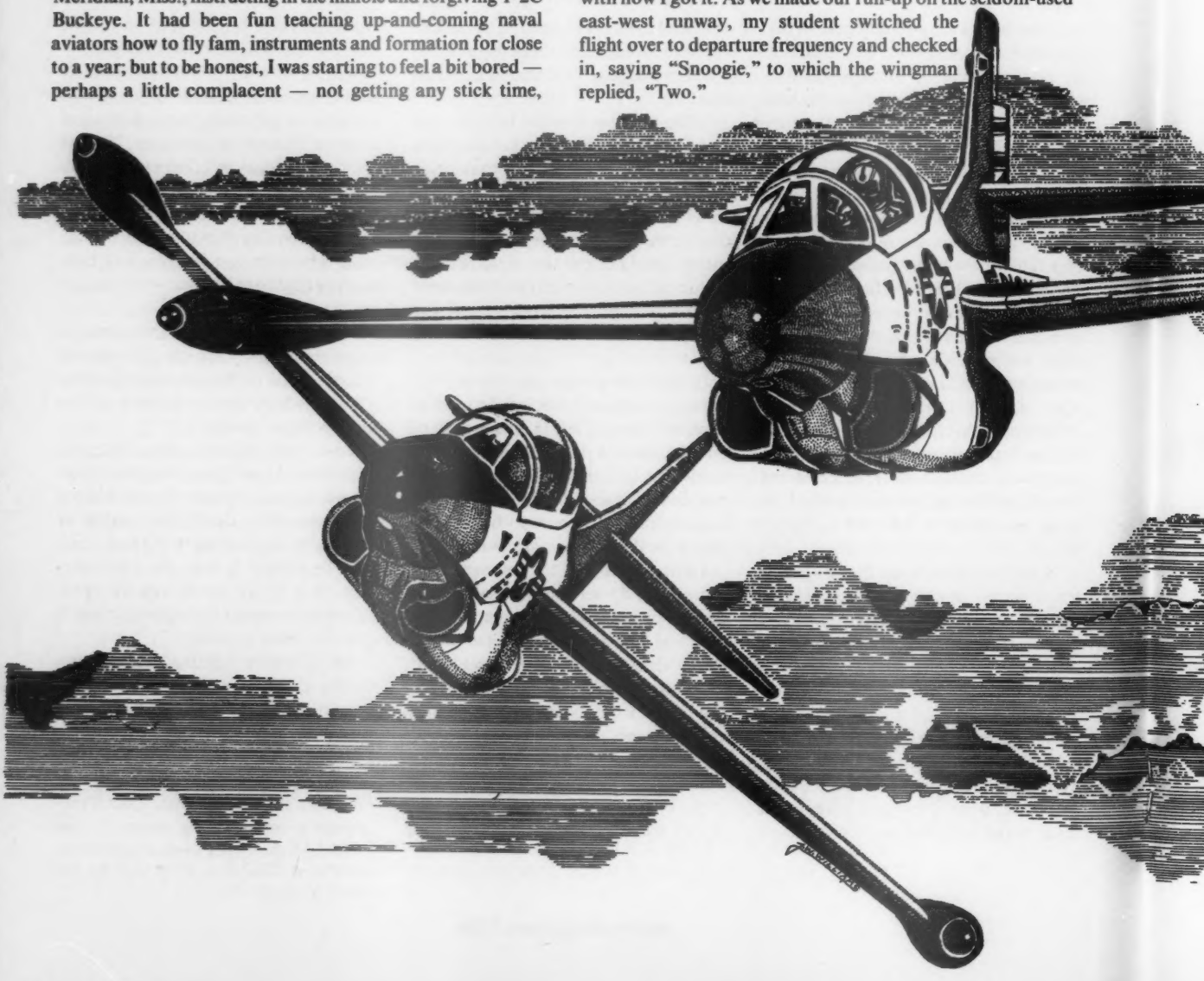
"So You Don't Think it Can Happen to You?"

By Lt. Eric E. Engleman

MIDAIR collision — it's one of those things that we hate to think about. We do lots of talking about air traffic control, scan doctrine and whatever else that can lessen our chances of running into someone. Yet, collisions still happen, usually resulting from some strange string of events that ends in catastrophe. Here's how I almost bought myself a piece of prime Mississippi farmland.

I was a fairly experienced Sergrad at the time in beautiful Meridian, Miss., instructing in the nimble and forgiving T-2C Buckeye. It had been fun teaching up-and-coming naval aviators how to fly fam, instruments and formation for close to a year; but to be honest, I was starting to feel a bit bored — perhaps a little complacent — not getting any stick time, watching the other guy have all the fun. It almost made me want to be a student again!

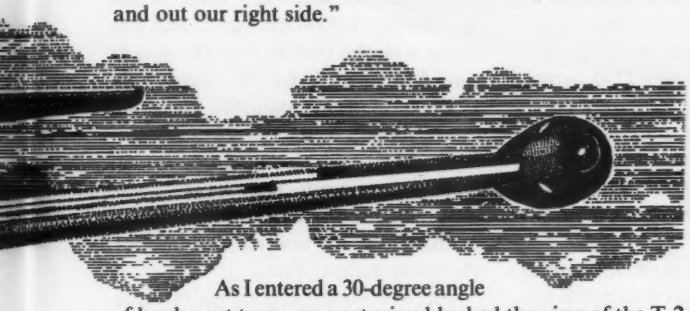
That particular morning, everything before the flight was routine. A breakfast bar and cup of coffee got the sugar spike going well before walk time. We suited up for a two-plane formation hop. Because I was the instructor and in the lead aircraft, we briefed that we would be "Snoogie" flight. That was my dubious call sign at the time — I won't bother you with how I got it. As we made our run-up on the seldom-used east-west runway, my student switched the flight over to departure frequency and checked in, saying "Snoogie," to which the wingman replied, "Two."



Even though we were taking off to the east, we would be intercepting a 10-mile arc that would take us north of the field, and eventually out the 270 radial to the working area. As we made our takeoff roll, I noticed a single T-2 at the hold short, next in line for takeoff. I didn't know it at the time, but in a few minutes we would become very "intimate" with this fellow. Climbout to 10,000 feet went smoothly, with my student pegging the Buckeye's airspeed right at 250 knots throughout.

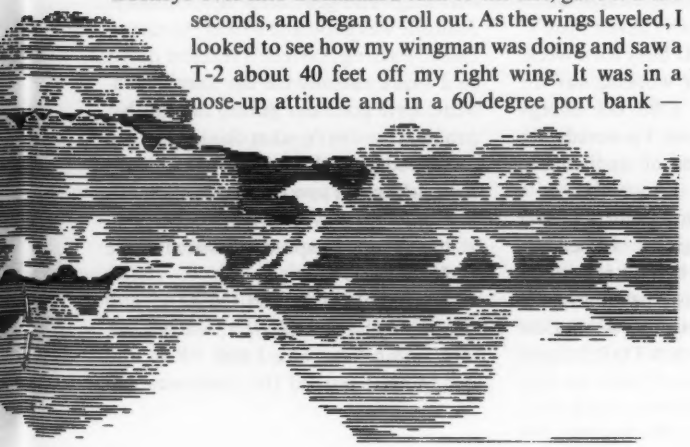
As we arced around the north side of the air station, I heard the T-2, who was now taking off, call for an early turn to the west. His request was approved by departure. I didn't dwell on this fact too long; I was thinking about the unmerciful rock-hard seat underneath my rear end, and making sure my student didn't stray too far off the 10-mile arc.

As we approached the turn to the 270-degree radial outbound, with Dash Two nestled on my starboard wing, I looked to my left and noticed a T-2 about 2,000 feet below us heading west on a course that would take him directly underneath our formation. "Hmm," I thought, "it's probably the T-2 that took off behind us, cutting us off at the pass." Then I saw the Buckeye begin to climb. "All right!" I thought. "My chance for some stick time! I'll just take the controls here and do a gentle left turn, let him pass underneath and out our right side."



As I entered a 30-degree angle of bank port turn, my port wing blocked the view of the T-2 below. Seconds later, as I got through about 20 degrees of turn, I heard the pilot on my wing yell my name: "Eric, turn left! Eric, turn left!"

Wondering what the heck he was yelling about, I put the Buckeye over into a semihard turn to the left, gave it a few seconds, and began to roll out. As the wings leveled, I looked to see how my wingman was doing and saw a T-2 about 40 feet off my right wing. It was in a nose-up attitude and in a 60-degree port bank — about to hit me! "What is my crazy wingman doing?" I wondered, and slammed the stick over to get away. I then saw that the markings on the top of his fuselage were not the markings of my squadron, but of our sister squadron. At about that time, the renegade T-2 leveled his wings and continued up and eventually out of sight above us. With the threat passed, I rolled out and looked for my *real* wingman, who I could see about 300 feet away at my 4 o'clock.



The rest of the hop went routinely, but I was really shaken. I couldn't stop thinking about the near-midair. It seemed *impossible* that at one moment an aircraft could be so far away, and the next, come within a few feet of killing me and my student.

After getting back on deck and giving my Sierra Hotel student naval aviator two "aboves" for flying a real fine hop under the circumstances, I walked down to the other squadron to see who it was that I had nearly "touched." Once I found out, we got together for a short talk in the squadron gedunk.

"Eric," I said. "Did you know that we almost had a midair?" He said he wasn't aware of any close call and then asked me if I knew who it was that was yelling for him to turn left! "Wait a minute," I said in disbelief. "You mean you thought my wingman's instructions were for you?" The other Eric replied, "Well, I heard someone telling me to turn left, so that's what I did."

The pieces of the puzzle fell into place. It seemed incredible that this million-to-one chance meeting came within 40 feet of happening — **all because we shared the same first name!**

Later, as I talked to my wingman, I found out that he saw the T-2 below us begin a steep climb just after I started the initial left turn. That's when he called for me to turn left. He watched in horror as the other T-2 also turned left, narrowly missing me.

As it turns out, my wingman did a great job of keeping sight of the renegade T-2, and of trying to maneuver me clear of danger. His efforts, though, were foiled because the instructors in each of the wildly maneuvering Buckeyes had the same first name. The other Eric also did all he could do. Anyone would have followed the instructions given by someone that was emphatically using his name.

Well, I felt lucky to be alive. I went home that night with a lot to think about. A couple of lessons from the day's events occurred to me. First, assume that any aircraft that you see out there, no matter how far away, is made of magnets that are drawn to your aircraft. Once you see another plane out there, be aggressive about maneuvering out of his way.

Second, if you're going to use a call sign, make sure it's unique and make sure that everyone in the wing knows and uses it. My rather silly call sign would have saved me from getting a few gray hairs that day. ◄

Lt. Engleman flies A-7Es with VA 27.

Advantages Not Taken

By LCdr. Rod Baker

. . . I pushed the nose over and got a firm grip on the seat cushion. I felt adrenalin oozing out everywhere. I waited for things to get better . . .

IT had been a rough day. At 0215 I was called on a Red Cross message that had me up and about for a couple of hours. On my way back to the rack, I ran into the ops yeoman with the day's schedule: a 2000 brief for a 2145 launch into the demanding but boring overhead tanker circle. No big deal and no planning required, so I'd have time to catch a few winks between trying to become familiar with my new job as admin officer.

0715. "General quarters, general quarters. All hands man your battle stations." Normally the rack would have been my battle station of choice, but this was a graded evolution.

By the end of the three-hour GQ, the sleepy minds in the ready room had become alert, producing enough questions, demands and "why haven't you's" to keep a new admin O busy for a week. The coffee buzz was working for me now. However, by 1700 my energy reserve was running out. I proceeded to my rack for an hour of undisturbed catch-up sleep.

As I was hanging my flight suit over the back of the chair, I noticed my "things to be done" list: Fitrep inputs due day after tomorrow, pay discrepancies, expect to lead major air wing strike on Wednesday, NATOPS quiz tomorrow.

It didn't take long for my much-needed R-and-R to turn into a much-needed paper work reduction effort. Delving into the paper pile, I was soon surprised by a phone call from my B/N to ask if I was going to attend the flight briefing. Back into the bag and out the door. I didn't miss much of the brief. I got all the important stuff, like the scheduled recovery time (2330), ship's position and hot area brief.

My B/N was busy, too. As MO he was fighting one of those continual battles over an aircraft that was buried in the hangar and that should have been on the deck at noon. I took advantage of his preoccupation to scan some new arrivals to my "in box." Nothing serious; in fact, a quick phone call or two solved the problems.

We had been at sea for six days, I'd completed my night CQ three nights ago, had my 1,000-hour patch, and was flying with the best B/N in the squadron. I read the A.D.B., signed the weight chit, and conducted a normal preflight and start up. Good hook check, seats armed, pop up and anti-skid off, trim set six units up, wings down, proper configuration, good weight board, ready for tension. Did I check the boost pumps? Yeah.

OK, here's tension, good instruments, good wipe out, no warning lights, you ready? Lights. We're out of here. Good airspeed. Quite a kick. Everything worked.

I got the gear moving right off the cat. Twenty-two units AOA and we were climbing. The gear came up normally. Attitude was good and so was the rate of climb. Passing 500 feet, I reached down to a black console for the anti-smash. Must have gone out during the cat. No problem — that's what flashlights are for. Good attitude and climb rate. With my flashlight, I saw that the anti-smash was on.

"Airspeed, airspeed, airspeed!" the B/N shouted.

The indicator showed 130 KIAS and dropping fast at 1,200 feet, wings level. The climb rate was 1,000 FPM and dropping. I pushed the nose over and

got a firm grip on the seat cushion. I felt adrenalin oozing out everywhere. I waited for things to get better. They did. The rest of the trip was dominated by silence; it had my complete attention.

I had not taken advantage of several opportunities that would have enhanced safety of this flight. For example, I missed some sleep. I didn't concentrate on the brief. I used time between the brief and man-up for some unrelated phone calls.

What saved my bacon was the experience of my B/N. He noticed that when I had read off the trim setting, it was a unit higher than normal for ship operations. He took it as a matter of habit (because we hadn't had the time to brief it) to hawk the flight instruments, especially as I fumbled for a flashlight. We survived that night for the wrong reasons. I was not rested, not thoroughly briefed, not focused on the task at hand and *not ready* to fly. ◄

LCdr. Baker is an A-6 pilot with 1,000 A-6 hours and 1,000 as ECMO in EA-6Bs. He is assistant admin officer of VA 95.

My Night in the Barrel!

By Lt. L.P. Molloy

WHAT is a nugget pilot's biggest fear about going on his first major deployment? Is it having all his evaluations kicked back? No, he knows how to handle the maintenance officer. Is it being chosen as squadron first lieutenant? Definitely a scary thought, but being a competitive fighter pilot, he looks forward to the challenge of winning the Golden Throne Award. How about the possibility of entering a hostile multibogie environment with SAMs and AAA? No way. Being young and somewhat naive, the thought of applying his training to the real-world threat and maybe earning a Silver Star excites him beyond belief. That leaves us with the idea of having to endure the dreaded night in the barrel. After one particular night, I realized I wouldn't wish that "barrel" on my worst enemy.

It was one of those scheduled "pinky" launches with a night EMCON recovery off USS *Boat* 700 miles from NAS Anywhere. As my RIO and I walked to the airplane, we noticed the deck pitching quite a bit, but that wasn't unusual. We had been working MOVLAS because of pitching decks, for well over a week.

As we completed our uneventful CAP mission, we returned to marshal and pushed on our pre-briefed time. At three-quarters of a mile, I looked out toward the lens and was overwhelmed. Although the ball was centered, the deck looked like a windshield-wiper going vertical (38 feet to be exact). "I've never seen this before," I thought. "Even though I'm single, my RIO is married, so maybe I'll add just a little extra power to keep us off the ramp."

As we crossed the ramp, the deck went down and we had bolter No. 1. Being the second airplane to push from marshal, our downwind was extended to 10 miles before CATCC could hook us in. Approaching the ball call this time, I was determined to not only avoid fixating on the deck, but to concentrate on what the LSOs were showing me as well. Unfortunately, although I got a good start, the deck was foul and we were waved off for pass No. 2. Passes 3 and 4 were similar to the first one with the deck being out of cycle, resulting in bolters. Our fuel state was now down to 3.2, and our signal was "tank." The real fun was about to begin.

The tanker was across the circle from us at 2,500 feet, having just completed tanking an S-3. Just as we rendezvoused on the A-6, we immediately entered the goo. Gas was down to 2.5. Even though I probably had more practice plugs in the past month than any other pilot in the squadron, trying to tank in turbulent air still proved to be fruitless. We asked the tanker to climb above it, and we reached clear weather at 8,000 feet.

Gas was now at 1.8. We had 0.0 showing on both totalizers since they had been reading 2,000 pounds off the entire flight. The fact that the air was still slightly turbulent and the black juice I was squeezing out of the control stick was beginning to line the inside of the canopy made plugging seem virtually impossible. I've been flying airplanes for over three years now, and I was utterly amazed at how fast gas could burn! All sorts of things were going through my mind. The vision that kept coming back time and time again was the one that had me standing in front of the Skipper trying to explain why I ruined a perfectly good airplane because I couldn't plug. Honestly, that thought scared me much more than barricading or even ejecting!

Gas now down to approximately 1.5 — SOP barricade fuel. My RIO had already keyed the radio, ready to say "we're on our way back for the barricade." At this point the A-6 was dragging us toward the ship and the barricade was about to go up. For some unknown reason the air miraculously smoothed out. I relaxed and then made successful contact with the basket.

Air Ops: "103, are you in?"

103: "Yes, with no flow!"

411: "We don't show you in."

103: "Believe me, we're in!"

411: "We show you in now with good flow. Boss, how much should we give?"

Boss: "How much do you have?"

411: "6.0."

Boss: "Give him 6.0!"

After passing 2.5 on the gas and feeling fat, dumb and happy, the thought of getting aboard seemed almost easy. We left the tanker with 7.0. We proceeded to enter the downwind, hooked in at four miles and with a few encouraging comments from the LSO, flew an OK 2-wire.

After shutting down and exiting the airplane, I walked down that long passageway to the ready room, thinking that all eyes would be upon me. Walking through the door, the first person I saw was, of course, the Skipper. Half expecting to get chewed out, I wasn't prepared for the Skipper's comments. "Do you know that in your entire naval career, you may never have a more terrifying experience?" he asked. He then told me how proud of me he was for coming through when I had to. What a confidence builder that was!

I learned two major lessons from this experience.

First, don't waste flight time when you could be training. If you've got a few extra minutes off the catapult or before marshal, get practice plugs. It just may save an airplane or even your life. Second, commanding officers — have faith in your JOs, and give them that boost of confidence whenever you can, especially when they're down. Believe me, it helps.

Lt. Molloy flies the F-14A Tomcat with VF 1, the Wolfpack.

02
02
02

BRAVO ZULU

Lt. Douglas Ruth (left),
Lt. Christopher Blakely (right).

Lt. Douglas Ruth
Lt. Christopher Blakely
VAQ 34
LCdr. Danny Knutson
CVW 11

Immediately after taking off from NAS Point Mugu in an EA-7L, Lt. Ruth and Lt. Blakely got a call from departure control stating that the aircraft had lost a main landing gear wheel on liftoff. Visually confirming the problem and consulting with the squadron on UHF, the crew decided to divert (gear down) to NAS Lemoore for a field arrestment. While in transit, the LATWING staff tasked LCdr. Danny Knutson, an A-7 LSO, to provide assistance.

The crew flew several practice approaches to set up for an arrestment with the landing gear touching down past the wire. The first four attempted engagements resulted in slightly long touchdowns with successful go-arounds. On the fifth approach, with 1,500 pounds of fuel remaining, Lt. Ruth flew an "OK, no comment" pass into the wire using the HUD and LSO backup. The aircraft rolled out with a slight swerve, staying on the runway and damaging only the brake assembly on the wheelless strut.

Capt. Joe Bonsignore (left), Capt. Matt Mead (right),

Capt. Matt Mead, USMC
Capt. Joe Bonsignore, USMC
VMA(AW) 533

While flying as a wingman on a low-level training mission in southern France, Capt. Mead (pilot) and Capt. Bonsignore (B/N) experienced a right engine flameout in their A-6E Intruder. The crew climbed and initiated NATOPS air-start procedures. Relight was immediate, and flight lead was advised of their success as the lead aircraft conducted a visual check of the aircraft's exterior. Approximately 15 seconds later, the right engine again flamed out. The engine was then secured, and the flight turned to recover aboard USS *John F. Kennedy* (CV 67) operating in the Mediterranean. Visual check of the stricken aircraft revealed no damage or indications of the malfunction.

During transit to the CV, Capt. Bonsignore noted multiple minor electrical failures and popped circuit breakers, but he could not associate them by bus.

Overhead the ship and preparing for single-engine recovery, Capt. Mead attempted to dump fuselage fuel to optimum single-engine performance gross weight. Fuel would not dump, so the crew maintained single-engine flight for an additional 50 minutes to reduce their gross weight. Capt. Mead and Capt. Bonsignore performed a textbook single-engine approach to an arrested landing aboard the *Kennedy* on their first pass.

Postflight inspection revealed that an electrical fire caused by a chafed wire below the aft fuselage fuel cell had shorted circuitry to the right engine gate valve and destroyed wiring to the fuselage fuel dump pump. The air crew eliminated a source of ignition by securing the right engine after the second flameout and prevented major damage to the empennage by fire. Accomplishment of the single-engine landing — no small feat — allowed investigators to identify a severe hazard to the A-6 community.

Left to right,
AW2 Michael Mitchell,
Lt. Ken Ireland and
LCdr. Dave Lincoln.

LCdr. Dave Lincoln
Lt. Ken Ireland
AW2 Michael Mitchell
HSL 42

OS2 Jason Meadows
OS3 Robert Beers
OS3 William Walsh
USS *Underwood* (FFG 36)

During a night ASW exercise, LCdr. Lincoln and his SH-60B crew monitored the USS *Yorktown* (CG 48) land/launch frequency. The SH-2F from the *Yorktown* reported flight control problems immediately after takeoff.

Lt. Ireland, at the controls, turned the Seahawk toward the *Yorktown*. LCdr. Lincoln, as air tactical officer (ATO), alerted their air tactical control operator (ATACO), OS2 Meadows, in the *Underwood*, via the data-link.

The ATACO broke EMCON by bringing up the ship's radar and directed his crew, OS3 Beers and OS3 Walsh, to plot the distressed helicopter's position before it ditched. In seconds, the SH-60 crew had a fly-to point; and within 15 minutes, they were on top of the downed *Yorktown* air crew.

In 8-foot seas and 25-knot winds, AW2 Mitchell hoisted the H-2 air crew safely aboard. ◄

. . . In a fraction of a second, the hose made two or three violent slams against the radome and the side of the fuselage, then whipped itself around the refueling probe, knotting itself . . .

"Uh-oh, I Think the Hose is Tied in a Knot!"

By Lt. Mike McLeod

ALL aircraft launched on time and rendezvoused overhead. Comfortably on my MO's wing, we pressed on in search of the tanker. My first glimpse of a large moving star (the tanker) on the horizon generated some of those performance-enhancing butterflies.

Once aboard the tanker's left wing, I began to remember that it wasn't *really* so easy for an A-7 to plug a KC-135 at 20,000 feet. I settled down and watched everyone else ahead of me stab at the basket while I put out my probe. "Damn, no probe light," I thought. "Hmmm . . . it sure is dark tonight." Two days earlier I needed three stabs to get into the basket, only to get spit out immediately. That hose sure was stiff! It had taken a few more jousts with my opponent to get a day qual.

"There goes the MO, clearing to the right," I thought. "It's showtime. Trimmed up, in position, a little power, a little more power, contact . . ." I got spit out. "OK, I'll get it this time with a nice . . . handful . . . of . . . power . . . Whoa! Too much!"

As I hit the basket with excessive closure, the *stiff* hose bent into a complete circle instead of a half-loop, and the swivels on each end made contact. In a fraction of a second, the hose made two or three violent slams against the radome and the side of the fuselage, then whipped itself around the refueling probe, knotting itself. Uh-oh! Having pulled power I began to back out, which only tightened the mess. The tension cocked the basket and broke the tip of my probe as it jerked the nose of my jet up. A quick flail with the stick and throttle was followed by a long silence. As I stared at the unusual configuration of the basket, visions of being dragged back to the tanker depot in Oklahoma paraded through my head.

My request to the tanker's boom operator cued my lead to my predicament: "Uh, tanker, could you move the boom down a bit?"

"You got a problem?" he wittily replied.

"Yeah. I think the hose is tied in a knot."

At this point the tanker cranked up all his lights and made some simulated daytime, like a scene from "Close Encounters." The situation was in full view to everyone. Now what? There are no procedures for "aircraft tied to tanker" or "refueling hose knotted."

Time to figure it out for myself. Choice one, back out till the hose breaks or the probe rips off, probably FODing the engine. Choice two, try to untie it. Oh, great!

For about 10 minutes we tried a variety of maneuvers to loosen the hold of the basket and hose. It only made the knot

tighter, and when the boom operator tried, it jerked my jet around like it was a toy. Finally, by moving the boom fully down and to the left as I flew to the right, the whole mess began to loosen.

As the hose slid off in a series of quick jerks, it became apparent that the hose would straighten and probably hit the canopy. When the large metal basket did pop off, I ducked, closed my eyes and pushed the stick forward. A few seconds after hearing a loud crack, I looked up to see the tanker far above me. Levelling out, I started to poke my finger around on the canopy to see if it was still there. It was, fortunately, but with two deep gouges at the top just aft of the center mirror.

The rest of the flight was "uneventful" (I love that word). Luckily, postflight revealed only a scratched canopy and broken probe tip. After discussing the events of the evening with my flight lead, we concluded that *sometimes you're on your own*. This means you are on unexplored turf, not to be confused with the "do whatever it takes" we encounter in training situations. With today's emphasis on TCIs, SOP and NATOPS, we seldom come across a situation for which there is no guidance. Unlike our aviation predecessors who ventured forth into the blue to see what they could get away with, we have the luxury of their errors and reading of their mistakes (the ones they survived anyway).

Most who fly have encountered something that generates the dreaded "Uh oh" . . . then they piece together a plan of action. Generally, this plan is in the form of a NATOPS pocket checklist. Occasionally, it involves some coordination between the tower rep and Paddles to take all the guesswork out of the equation. Strict adherence to established procedures will almost always work, but when you find a situation that has no fixed solution, it's time to fall back on your flying experience (however much it is), knowledge of your aircraft and common sense. When the unusual is encountered, take a close look at what happened and learn from it. Pass it on. Get the word out. ◄

Lt. McLeod is an A-7 pilot with the VA 46 Clansmen, based at NAS Cecil Field, Fla.

Another Night Tanker Story

By Lt. Dave Maybury

MANY of us A-6 air crew do not like fighter crews. It's not because they are idiots or steal the chicks at the club. No, we don't like fighter crews because of tanker missions. The tanker mission at 16 units AOA is slightly less exciting than Figure 8 CAP stations.

Night tanker hops, on the other hand, are full of excitement but not the kind anyone wants. The altitudes are lower. The pattern during a Hawk is tighter. And it is dark out there, downright scary at times. Remember vertigo? It is alive and well in a night tanker pilot's collection of fears.

So there I was, last night tanker with a senior cat 2. He had seen his fair share of hair-raising night tankers. I was a junior cat 1 B/N fresh out of the rag, and I felt pretty comfortable with "Dad" in the left seat. The pattern was running smoothly with the fighters doing a great job getting aboard. We had a couple of Hawks, but they managed to get aboard. As the recovery continued, the weather started to deteriorate. We had managed to dodge clouds earlier but finally decided to descend to keep the carrier and Hawks in sight.

We reset the radar altimeter at 1,800 feet, but as we passed through 2,300 feet, the clouds diminished. The recovery was almost complete. As we leveled off, something caught my eye off to the right. An A-7 was very close and converging rapidly. Unable to physically control our flight path or my excitement, I screamed, "Right, right, right!" Dad looked right and promptly pulled the KA-6D into buffet and overstress. We missed, thank God. We listened for the other guy on the radio.

Had he seen us? Did approach control realize we had just soiled our flight suits? Silence. No one had seen it. Dad and I caught our breath and decided we'd discuss it with approach control after landing. Our recovery proceeded smoothly with an OK-two wire. Approach did have an A-7 on downwind about that time but didn't see a near midair. We saw it. The A-7 pilot didn't.

My squadron mates asked, "But what does it all mean, Marble?" A few possible conclusions came to mind:

Just because your pilot has lots of experience doesn't mean you are invulnerable.

Give Approach a heads-up when deviating from what's expected. They are there to help.

Positive radar control doesn't eliminate midairs. San Diego knows.

The A-6, with its seating and windscreen arrangement, is vulnerable to unseen aircraft in the 12:30-2 o'clock region. B/Ns should take a moment to reevaluate how well they scan their side. Crews need to discuss standard phraseology for pilot action in the event of extremis. Cat-like reaction may save the two of you someday, a sure sign of good crew coordination. ◄

Lt. Maybury is a B/N in VA 115. He is also the squadron NATOPS officer.

Quit Being a Blob

By Lt. Jerry Linenger, MC(FS)

EXCESS body fat, as stated in the Manual of the Medical Department, is a "serious detriment to health (mental and physical), longevity, stamina and military appearance." Many adverse health conditions result directly from obesity: high blood pressure, diabetes, numerous orthopedic problems (it should come as no surprise to an overweight person that his back aches when he carries 50 pounds of excess baggage on his body daily).

Sooner or later, it will kill you. Besides causing you to fail your flight physical, your quality of life degenerates, your self-image is marred and disease develops. Big cost, no benefits.

Undoubtedly, you have at least 100 reasons why you've gained weight. Your gourmet-cooking wife, long work hours, cruises, irregular flying schedules, whatever. But these things didn't force your mouth open or push your lethargic body onto the couch for a night of TV. You did. Take responsibility for your health, and quit making excuses.

Facing up to the problem is 90 percent of the battle. Take the one-minute test: strip naked, stand in front of a mirror and take an honest look at yourself. Forget the height-weight tables and percent body fat figures and just be honest with yourself. The how-to is easy, and I'll outline the Dr. Linenger Aviator Diet Plan shortly (every other doctor writes diet books).

The underlying theory behind weight gain or loss is **input-output**, like a car: put in too much gas (food), it overflows the tank (fat). Run the engine (exercise) and fuel is consumed (fat). Forget calorie counts, daily weigh-ins, fad diets. In short, forget the "rhythm method of girth control" and start leading a lifestyle that will eliminate (after an initial, determined effort) having to even think about being overweight. Make it easy on yourself.

The mechanics. Get a small pocket notebook, consecutively date each page, and make the four entries as shown on the "sample page" below:

SAMPLE ENTRY
16 JAN 88
(1) THREE MEALS
(2) NO SNACKS
(3) 45 MINUTES OF EXERCISE
(4) COMMENTS

In order to get your daily "check in the box," the following criteria in each category must be met:

(1) THREE MEALS

Eat something three times per day. If a non-breakfast eater, start. A piece of toast is fine, just eat something.

Eat half of a normal portion. Fill your plate like always, then take half away. Physically do this the first month! Don't estimate.

No dessert.

(2) NO SNACKS

None! Nothing to the mouth except at meals. This includes popcorn at movies, beers with the boys, diet sodas, everything. If you skip breakfast and "make up for it" with a midmorning snack, you've blown it twice! Drink lots and lots of plain water.

(3) 45 MINUTES OF EXERCISE

Continuous, and I highly recommend just plain walking for at least one month (why risk an injury?). Grab a companion by the hand and time a 45-minute brisk walk. Everyday. No exception.

Your health should be the number one priority in your life. If you sit down in the evening and haven't given your body its measly 45 minutes, re-examine your priorities, then go take your walk.

(4) COMMENTS

Make brief statements to remind yourself why you failed. Review these weekly looking for trends. Then avoid situations where failure is imminent.

Three simple checks a day, and I guarantee in one month your body will be moving toward its proper set point. Declare to the world what you're attempting, put it in writing, make no excuses, and quit kidding yourself. Display some courage and personal pride, and take responsibility for your health.

Final comment: The program works! Many squadronmates have been highly successful in reaching their ideal body weight and feeling good about themselves once again. Furthermore, the program can be readily incorporated into your squadron's weight control program to enhance everyone's health. ◄

Lt. Linenger is a flight surgeon at NAS Cubi Point.

1987 Approach Index

	Month	Page
ACM		
Tallyho — Fight's On — Helo EVM and NVG flying	SEP	27
Aeromedical		
When You're Hot, You're Hot — Marine Style — dehydration	JUN	7
Post Trauma Stress Syndrome	JUL	10
John — questions about smoking? Here's a good case against it	SEP	11
The Crew Rest Dilemma — fatigue is usually not listed as a primary cause of mishaps; it's easier to blame the pilot	NOV	10
Alcohol and the Naval Aviator — a deeply personal discussion	DEC	2
Aircraft Types		
A-4		
There I was — instructor faces 20 percent oil light	MAY	16
Bravo Zulu — VC 13	AUG	23
Bravo Zulu — VT 24	SEP	16
Bravo Zulu — VMAT 102	OCT	22
Mayday! Mayday! — USAF KC-10 crew helps rescue a Marine A-4 aviator	OCT	28
A-6		
A Slight Change of Plan — KA-6D loses nose gear off cat	APR	10
Bravo Zulu — VMA(AW) 242	MAY	26
Are You Really Ready? — jettisoning stores off cat	JUN	16
The World's Greatest Attack Pilot — author Stephen Coonts recounts a low-level flight in Vietnam	AUG	2
How to Fit Three Aircraft Into the Same Holes in the Sky — An ounce of heads-up is worth a pound of radar	AUG	18
Bravo Zulu — VMA(AW) 121	SEP	17
Not in NATOPS — An EA-6B incident	OCT	11
Bravo Zulu — VA 85	OCT	21
Wake Island Commando — an alert tanker crew finds itself in need of fuel	OCT	26
You Always Have Enough Gas, Right?	OCT	33
A Naval Aviation Tragedy — can this happen in your squadron? An A-6 mishap with broader implications	NOV	2
Bravo Zulu — VA 55	DEC	22
A-7		
"Hear No Evil, See No Evil, Speak No Evil" — changing flight lead leads to problems	AUG	26
One Down and Locked — an A-7 suffers a broken torque tube and a sheared fuel line	OCT	24
Bravo Zulu — VA 1287 — reservist brings his aircraft home after engine failure	NOV	22
Corsair Landing NMAC — airbreak	DEC	11
AH-1		
Taxi To. . .Cobra pilot's problems in night ops	MAY	22
Amphibious Cobra — why the helo settled into the water remained unknown	AUG	32
AV-8B		
Safety and the AV-8B: Approach Visits MAG-32	MAY	18
Bravo Zulu — VMAT 203	NOV	22
Red-Tailed Hawk vs. Green-Tailed Harrier — low-level birdstrike	AUG	4
C-1		
That Can-Do Spirit — flying a mercy mission in a C-1 in a fog	SEP	23
C-2		
Props Kill! — flight deck safety around props	JUN	19
E-2		
Bravo Zulu — VAW 124	AUG	24
Things Aren't Right — E-2 in bad weather	DEC	20
Bravo Zulu — VAW 116	DEC	25
F-8		
Crusader Crunch — last F-8 ejection with mishap reminder	JUN	22
F-14		
Another Gnarley Night in NORPAC — problems over the cold ocean	APR	18
Sweptwing Landing in a Tomcat — airbreak	JUN	7
Uncommanded Wingsweep Off the Cat — airbreak	JUL	9
Bravo Zulu — VF 51	AUG	22
Next Gas Station is 100nm . . . — F-14 faces a bingo profile in bad weather	OCT	14
The Unfriendly Skies — problems waiting for the tanker	OCT	16
Bravo Zulu — VF 24	DEC	24
F/A-18		
Bravo Zulu — VFA 132	APR	25
Winder Waltz: A Different Kind of Weapons Delivery — a photo spread showing an AIM-9's dance down the deck after dropping off a recovering F/A-18	AUG	28
Bravo Zulu — VFA 303	OCT	20
Hot Hornet — potential for disaster — airbreak	NOV	6
H-1		
Emergency Landing at Sea — A UH-1 makes it to an FFG	SEP	30
Who's On First? or, Who's On the Controls? — a Huey makes an approach with no one holding the stick	NOV	16
H-2		
Following That Sixth Sense — dark night and approaches to the ship	APR	14
Bravo Zulu — HSL 32	OCT	23
H-3		
Sea King Eats a Cable — airbreak	JUN	6
Pinned to a Sea King — airbreak	NOV	7
Coordinated Helo Crew — airbreak	NOV	7
H-46		
Lessons Learned — H-46 desert ops	MAY	10
Bravo Zulu — HC-6	SEP	15
Night Vertep ITO Problems — airbreak	OCT	13
Five Hundred Feet and Zero Knots — coordination helps save a crew from a swim. Of course, a proper preflight would have saved them from the problem in the first place	DEC	12
H-53		
Bravo Zulu — VC 5	DEC	23
H-60		
Clearance to Taxi? — lack of supervision and attention causes ground problems — airbreak	NOV	6
I Had Forgotten How Fast Things Happen — pilot sets himself up for a mishap	NOV	26
P-3		
Flap-Induced Difficulty — fine-tuning flap transition	JUN	2

Never Give Up Fighting For Centerline — landing needed headwork and NATOPS procedures — JUL 32
"Pallet Away!" What Pallet? — A P-3's cargo pallet acts like a bomb during a simulated overwater attack — AUG 18
A Plane Commander's Option — static start story — SEP 10
Bravo Zulu — VP 93 — SEP 14
Making the Tough Call — P-3 hits a bird with resulting engine problems — OCT 30
Bravo Zulu — VP-6 — NOV 20
P-3 Merry-Go-Round — a brake failure leads to a wild ride — NOV 25
What Do I Do? — with only two engines, it's a long way to go — DEC 28

S-3

On Skid Row With a Viking — airbreak — JUL 8
Peanut Gyro in the North Pacific — 3 generators and 2 primary attitude platforms don't guarantee satisfactory flight instruments — DEC 21

TH-57

Bravo Zulu — HT 8 — AUG 25

Birdstrikes

Red-Tailed Hawk vs. Green-Tailed Harrier — low-level AV-8B incident — AUG 4
Making the Tough Call — P-3 hits a bird with resulting engine problems — OCT 30

Carrier Operations

Staying Alive in the CV Bureaucracy — bingo decision making — JUN 8
Does It Pay to Press a Launch? — JUN 13
The Flight's Not over Till It's Over — initial CQ problems — JUL 14
Do Tell — Can-do-itis coupled with cyclic ops can do you in — DEC 26
Safety on Deck — airbreak — DEC 10

Combat

Ejection Options — think and sort out the available options and stick with your decision — DEC 19
The Worlds's Greatest Attack Pilot — author Stephen Coonts recounts a low-level flight in Vietnam — AUG 2

Ejection and Survival

The Real Thing — flares can be a hazard at night for SAR crews — JUN 28
Night — night ejection — JUL 19
It'll Never Happen to Me — or will it? It pays to be ready for an ejection — SEP 13
Lessons Never Learned at DWEST — a parasailing nightmare — SEP 18
Mayday! Mayday! — USAF KC-10 crew helps rescue a Marine A-4 aviator — OCT 28
Preplanned Responses of the Personal Kind — thinking ahead may help you decide whether or not to punch out — DEC 8
Know When To Go, Then Go — When it's time to eject, don't delay — DEC 16
Ejection Options — think and sort out the available options and stick with your decision — DEC 19

Flight Operations

The Military Flight Instructor: Legend or Loser? — Can you transmit your experience to your student? — APR 28
An Accident Wanting to Happen — A-6 weapon delivery flight
Never Give Up Fighting For Centerline — P-3 landing needed headwork and NATOPS procedures — JUL 32
The World's Greatest Attack Pilot — author Stephen Coonts recounts a low-level flight in Vietnam — AUG 2
Quit Stalling Around — pointers on avoid stalls — AUG 16
"Pallet Away!" What Pallet? — A P-3's cargo pallet acts like a bomb during a simulated overwater attack — AUG 18
How to Fit Three Aircraft Into the Same Hole in the Sky — An ounce of heads-up is worth a pound of radar — AUG 18
It Could Go At Any Time — A-6 tanker NMAC — AUG 20
"Hear No Evil, See No Evil, Speak No Evil" — changing flight lead leads to problems — AUG 26
Crew Communication — just because a pilot has 3,000 hours doesn't mean he hears everything — AUG 30
Let's Do Away With Belly Landings — SEP 9
A Lesson Learned the Hard Way — get-home-itis strikes again — SEP 28
Next Gas Station is 100 nm. . . — F-14 faces a bingo profile in bad weather — OCT 14
One Down and Locked — an A-7 suffers a broken torque tube and a sheared fuel line — OCT 24
EMCON: The Thinking Man's Game — silence at night means be alert — NOV 14
Bravo Zulu — VP 6 — P-3 crew *really* loses an engine — NOV 20
A Sure Thing Never Is — An A-7 pilot lets himself be lead astray over a major city — NOV 28
It Was a Black Night — NVGs make a night SAR successful — DEC 7
Peanut Gyro in the North Pacific — 3 generators and 2 primary attitude platforms don't guarantee satisfactory flight instruments — DEC 21

FOD

Looks Can Be Deceiving — cockpit "stuff" as projectiles — JUL 7

Ground Operations and Maintenance

Clearance to Taxi? — lack of supervision and attention causes ground problems — airbreak — NOV 6
Pinned to a Sea King — airbreak — NOV 7
Supervisory Error: Accepted — inadequate direct supervision is the root cause of many maintenance errors — NOV 8
Who's Got the Runway? — Ground NMAC — airbreak — DEC 11

Helicopter

Helicopter Emergency Recovery System (HERS) — MAY 31
Lessons Learned — H-46 desert ops — MAY 10
Wire Strike! Wire Strike! — A Royal Navy pilot's encounter with high tension wires — AUG 14
Crew Communication — just because a pilot has 3,000 hours doesn't mean he hears everything — AUG 30
Amphibious Cobra — why the helo settled into the water remained unknown — AUG 32
Safety and HMX-1 — Approach visits the Presidential helo lift squadron at Quantico — SEP 2
Tallyho — Fight's On — Helo EVM and NVG flying — SEP 27
Emergency Landing at Sea — A UH-1 makes it to an FFG — SEP 30
Who's On First? or, Who's On the Controls? — a Huey makes an approach with no one holding the stick — NOV 16
I Had Forgotten How Fast Things Happen — pilot sets himself up for a mishap — NOV 26
It Was a Black Night — NVGs make a night SAR successful — DEC 7
Five Hundred Feet and Zero Knots — coordination save a crew from a swim. Of course, a proper preflight would have saved them from the problem in first place — DEC 12

Humor

Ned Gligent, Fighter Pilot — SEP 32
SHOE — low-level operations by a comic strip character — AUG OBC

In-flight Refueling

Fuel — editorial — OCT IBC
Plugging Air Force Tankers — a good resume of — OCT 2

fencing with the boom
The Aerial Refueling Systems Advisory Group (ARSAG) OCT 10
The Unfriendly Skies — problems waiting for the tanker OCT 16
Bravo Zulu — VMAT 102 OCT 22
Wake Island Commando — an alert tanker crew finds itself in need of fuel OCT 26
Mayday! Mayday! — USAF KC-10 crew helps rescue a Marine A-4 aviator OCT 28

Midairs (NMACs)

How to Fit Three Aircraft Into the Same Hole in the Sky — An ounce of heads-up is worth a pound of radar AUG 18
It Could Go At Any Time — A-6 tanker NMAC AUG 20
Model NMACs — P-3 nearly hits a model — airbreak OCT 12
Mayday! Mayday! — USAF KC-10 crew helps rescue a Marine A-4 aviator OCT 28
Just Another "Routine" Flight — an EA-6B and F-4 have a NMAC under radar control NOV 14
My Near Miss — A Coast Guard aviator describes his NMAC resulting from scrambled communications NOV 30
Corsair Landing NMAC — airbreak DEC 11
Who's Got the Runway? — Ground NMAC — airbreak DEC 11
Know When To Go, Then Go — When it's time to eject, don't delay — A-4 NMAC DEC 16

Miscellaneous

Safety and the Blues — Approach visits the Blue Angels APR 2
Safety and the Marines at 75 — Approach interviews LGEN Keith Smith, DC/S (Air) on the occasion of the 75th birthday of USMC aviation MAY 2
Winder Waltz: A Different Kind of Weapons Delivery — a photo spread showing an AIM-9's dance down the deck after dropping off a recovering F/A-18 AUG 28
Just a Humbling Experience — naval aviators' over-confidence nearly leads to disaster in a civilian light aircraft NOV 24
1987 Approach Writing Awards DEC 32

Mishap Investigation

Readers of the Lost Spark — electronic investigation JUN 10

NATOPS and Safety

I'd Rather Be Lucky Than Good — luck can't replace sound training and performance APR 9
No Time For Safety JAN 5

Safety and Command Responsibility

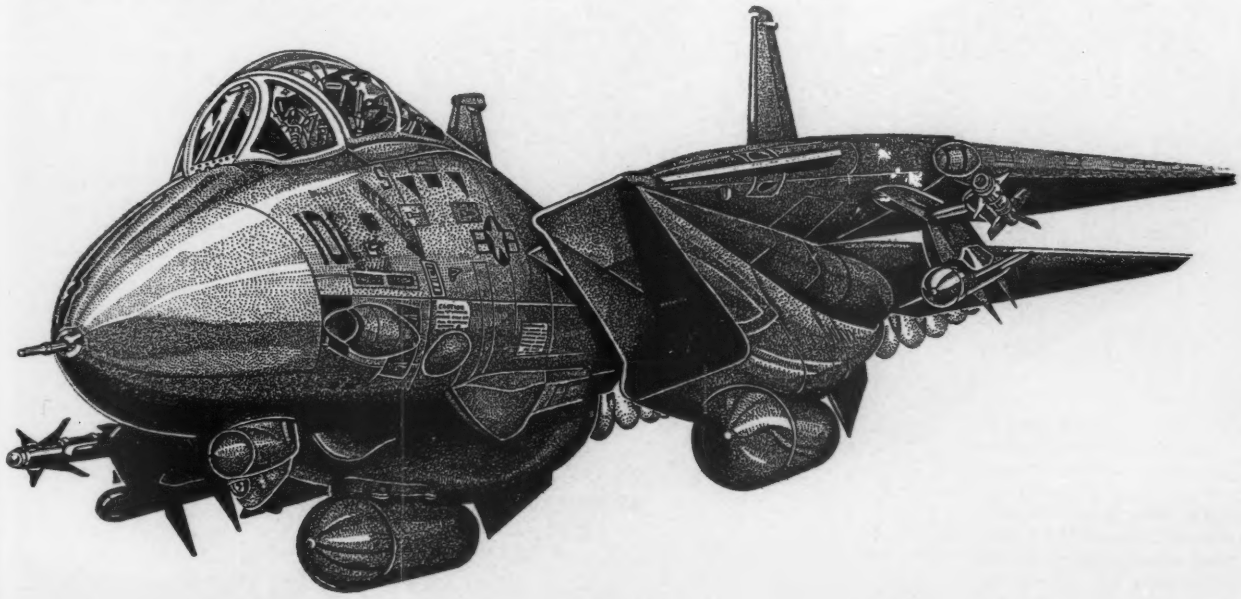
Are You a High Risk Pilot? — inexperience tied to mishap rates APR 20
The Military Flight Instructor: Legend or Loser? — can you transmit your experience to your student? APR 28
Getting Rid of the Boulders MAY 14
When the Balloon Goes Up, So Does the Mishap Rate JUL 2
What They Don't Know Won't Hurt Them — a CO's responsibility to say the unpopular thing JUL 22
The Cost of Doing Business — don't become part of the cost — editorial AUG 32
The Best of the Best — the movies aren't really real SEP 26
Today's Pro — Tomorrow's Bum — it takes as much effort to maintain the reputation as it did to achieve it NOV IBC
A Naval Aviation Tragedy — can this happen in your squadron? An A-6 mishap with broader implications NOV 2
The Care and Feeding of the Blue-Breasted American Flat-hatter — flat-hatting still causes too many mishaps NOV 18
"Thanks, XO" — how the XO handles a JO's flight transgressions NOV 32
Alcohol and the Naval Aviator — a deeply personal discussion DEC 2
Setting the Example — instructors can make bad impressions on JOs by exhibiting poor judgment DEC 27

Training

Homemade Video: A Training Tool That Works — using "local" talent NOV 12

Weather/All-Weather Operations

White-Out: The Phenomenon, Not the Affliction — discussion of winter problems APR 16
High Volts — flying into TBs APR 23
What If That's a Thunderstorm? — play the "what if game before the flight SEP 20
That Can-Do Spirit — flying a mercy mission in a C-1 in a fog SEP 23
Things Aren't Right — E-2 in bad weather DEC 20



LETTERS

Re: Marine Aviation Anniversary (May '87)

Hill AFB, Utah — This issue was truly superb in every respect. Since my early years in aviation as a young "brown bar" helicopter pilot, I have found *Approach* to be the best magazine of safety wisdom that I have read. This issue tops them all — it was fantastic.

Keep up the great work — your fellow Air Force aviators think you and your staff are Sierra Hotel.

Lt.Col. Michael N. Farage, USAF
Operations Officer
40th Aerospace Rescue and
Recovery Squadron (MAC)

Re: Attitudes (June '87)

Kelly AFB, Texas — I enjoyed reading this article. Please pass along to LCdr. Tom Witowski the following: Your attitude, not just your aptitude, will determine your altitude!

I try to follow this maxim each day at work, home and play. It has worked for me. I have received two promotions in less than 11 months.

Claire A. Herring
SA-ALC/MMMM
Kelly Air Force Base

Re: The Importance of Graphics (Aug '87)

San Diego, Calif. — I want to commend you for what is a significant addition to an already outstanding publication.

After careful review of the August 1987 issue, it is apparent that the improvement in the overall aesthetics of the magazine due in part to the extremely fine illustrations by newcomer John W. Williams.

His cover rendition of an A-7 on a weapons delivery sortie invites attention to the publication. Once inside the cover, his drawings are used to dramatize several other articles.

The articles in Approach, which have always been very informative and have contributed significantly to improving aviation safety awareness within the fleet, can easily stand alone. I think we all agree that photographs help put the "who" in these articles, as evidenced by the "Bravo Zulu" section. But these illustrations also help enhance the already interesting and informative articles themselves. I'm looking forward to more of the same outstanding publications.

LCdr. C.L. Mosely
Maintenance Officer
CVW 10 North Island

• Thanks for the kind words about the appearance of Approach. To maintain this look explains the constant need for on-the-spot photographs of day-to-day activities. When you send photographs, this keeps your magazine current, the artists up-to-date and Approach accurately representing naval aviation activities. Black and whites are fine. Send them to us, and we will guarantee suitable credit will be given.

Re: John (Sep '87)

Seal Beach, Calif. — I would like to comment on your fine magazine. I am an explosive safety specialist. I first read your publication about 2½ years ago when I began to work in safety. I have read it faithfully since. I use many of your articles in my explosive safety classes.

Your articles are excellent, especially the Bravo Zulu and the poster that is enclosed with each magazine. In your September issue, "John" was a very poignant story. I worked in the medical field for 20 years prior to my present job; I have had the same experience as Maj. Leonard. I hope everybody reads that article.

Paul D. Pudenz
Safety Department
Naval Weapons Station

Re: Preplanned Responses of the Personal Kind Correction: (Dec '87)

In the December issue of Approach, we inadvertantly changed LCdr. Rindler's article so that it appeared he was the pilot at the controls. Instead of "As I added power," it should read: "As the pilot added power." We were unable to correct this error prior to printing, and we wish to express our apologies to LCdr. Rindler for the error.

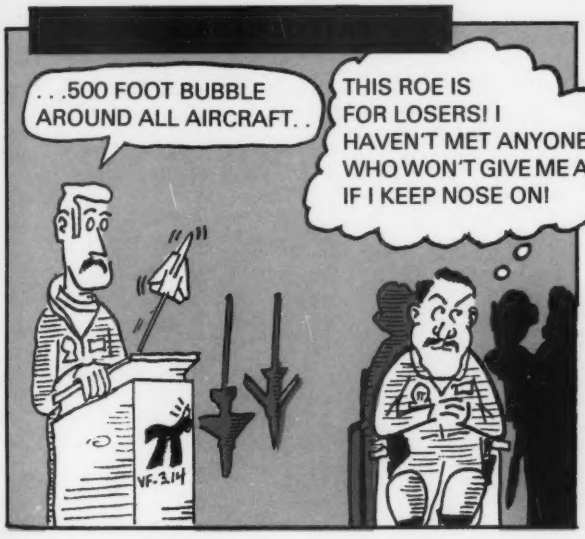
Approach welcomes letters from its readers. All letters should be signed though names will be withheld on request. Address: Approach Editor, Naval Safety Center, NAS Norfolk, VA 23511-5796. Views expressed are those of the writers and do not imply endorsement by the Naval Safety Center.

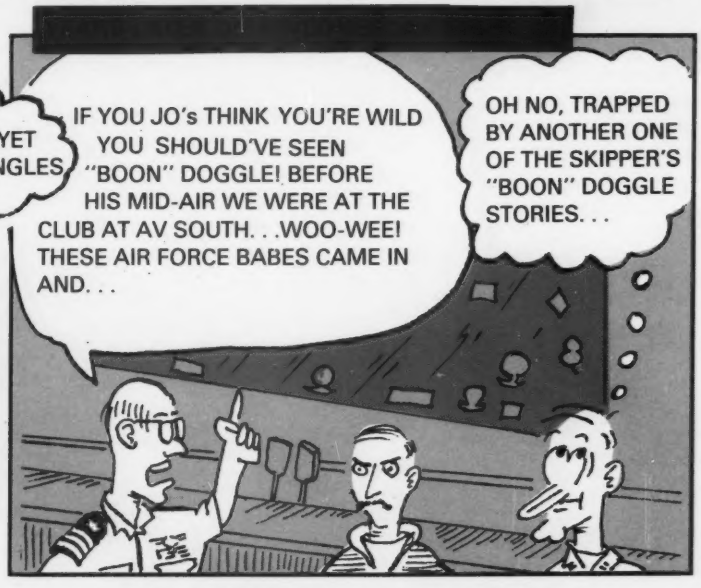
BROWNSHOES IN ACTION COMIX

"THE KIND REAL AVIATORS LIKE"

THE ORIGIN OF VF-3.14 IS SKETCHY, BUT IT IS GENERALLY ACCEPTED THAT IT STARTED IN 1946 AS DET 3.14 OF THE 103RD TRANSPORT WING. THEN KNOWN AS THE "DIGIT LIFTERS" FLYING THE C-47, THE SQUADRON ACHIEVED RECOGNITION FOR BEING "PRETTY GOOD FRIENDS" WITH SOME OF THE PILOTS WHO FLEW DURING THE BERLIN AIRLIFT. (RECORDS SHOW THAT THE 'DIGIT LIFTERS' WERE TASKED WITH THE AIRLIFT BUT COULDN'T MAKE IT DUE TO MISUSE OF OPTAR.)

IN 1962, DURING THE TRANSITION TO C-130's, THE SQUADRON ACCIDENTLY RECEIVED F-8 "CRUSADERS" AND RATHER THAN CAUSE A LOT OF TROUBLE . . . THE CO, WITH THE AID OF HIS ENTERPRISING COFFEE MESS OFFICER (NEW "ZAPPERS" WITHIN 48 HOURS), REDESIGNATED THE SQUADRON VF-3.14 "THE FIGHTING PI'S" (SUBMITTED BY LT LANCE "DANGER-BOY" JONES, SQUADRON PAO)


. . .500 FOOT BUBBLE AROUND ALL AIRCRAFT. .
THIS ROE IS FOR LOSERS! I HAVEN'T MET ANYONE YET WHO WON'T GIVE ME ANGLES IF I KEEP NOSE ON!
VF-3.14


IF YOU JO's THINK YOU'RE WILD YOU SHOULD'VE SEEN "BOON" DOGGLE! BEFORE HIS MID-AIR WE WERE AT THE CLUB AT AV SOUTH. . .WOO-WEE! THESE AIR FORCE BABES CAME IN AND. . .
OH NO, TRAPPED BY ANOTHER ONE OF THE SKIPPER'S "BOON" DOGGLE STORIES. . .

ROE. . .BRIEF IT. . .FLY IT. . .LIVE IT!

DON'T CURSE
THE DARKNESS;
...tie-down chains!
USE A FLASHLIGHT
Poster idea contributed by VA 95 Safety